INSPIRED SCIENCE TO DELIVER SUSTAINABLE SOLUTIONS FOR A GROWING WORLD

ANNUAL REPORT 2013

AMYRIS®

We apply inspired science to deliver sustainable solutions for a growing world.

Amyris is a renewable products company focused on providing sustainable solutions for a growing world. We developed innovative microbial engineering and screening technologies that modify the way microorganisms process sugars. We use our proprietary synthetic biology platform to design microbes, primarily yeast, and use them as living factories in established fermentation processes to convert plant-sourced sugars into renewable hydrocarbons — flexible building blocks that can be used in a wide range of products from fragrances and cosmetic emollients to industrial lubricants and transportation fuels. We are commercializing these renewable products, which we call No Compromise® because we design them to perform comparably to, or better than, currently available products.

TO OUR STOCKHOLDERS, CUSTOMERS, PARTNERS AND COLLEAGUES:

2013 was a year of progress. We successfully scaled our first industrial farnesene plant, produced and commercialized our first fragrance molecule, and significantly expanded our customer and product portfolio.

We entered 2014 as the only company in the industrial biotechnology sector that has successfully scaled and commercialized three different fermentation molecules while demonstrating the benefits to society of industrializing synthetic biology.

We are focused on applying inspired science in engineering yeast to solve our customers' biggest supply challenges. Our No Compromise® products and molecules help save lives, improve performance, and enable sustainable growth for some of the world's leading brands.

We believe consumers will choose to buy products made from renewable materials when there is no compromise to performance and price. We aim to make the world better one molecule at a time by providing consumers with the best alternatives.

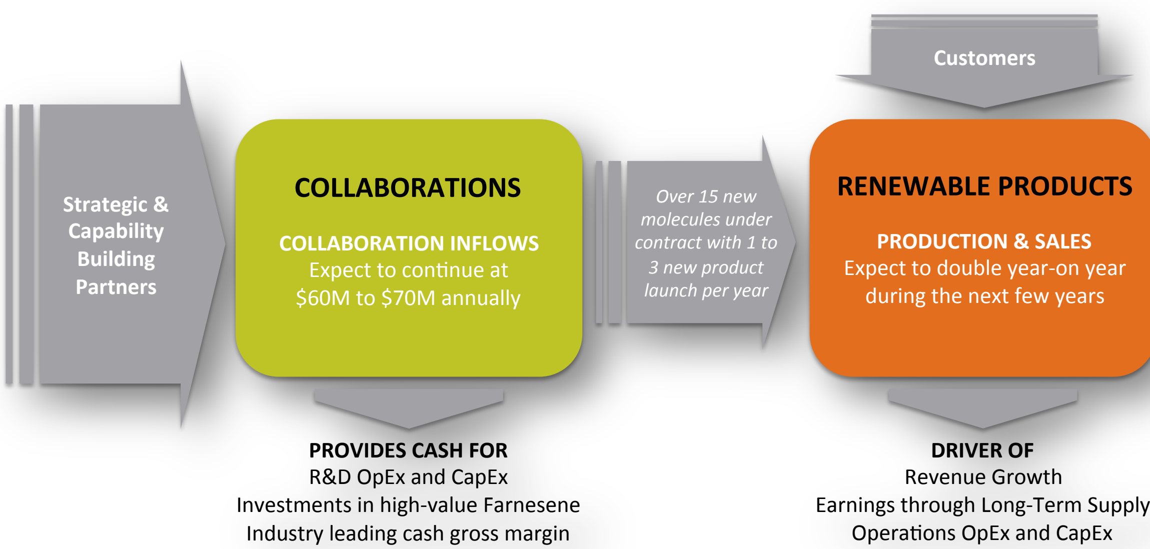
Our Business Strategy

We are becoming the leading provider of renewable products by collaborating with the world's leading brands. Our objective is to deliver better performance at a competitive price to the products we are replacing. By leveraging our synthetic biology platform, our partners' expertise, and our experience in industrial fermentation, we can enable our customers to reduce their environmental impact while maintaining or enhancing performance, reducing supply and price volatility, and improving profit margins. We have achieved this No Compromise value proposition with artemisinic acid, squalane and patchouli.

Over the last few years, our business model has focused on two key sources of revenue: *sales of our renewable products* and *inflows from technology development collaborations*. As outlined in the chart below, our business model is simple. We partner with leading companies to develop and commercialize products that perform equal to or better than existing ones while addressing their needs for stable supply and pricing of ingredients for those products.

We are developing a broad range of products across five business segments: cosmetics, flavors and fragrances, performance materials, and, with our joint venture partners, renewable lubricants and fuels. Our initial portfolio of commercial products has been based on Biofene®, our brand of renewable farnesene, a long-chain branched hydrocarbon, manufactured using our engineered microbes in fermentation. Our Neossance™ brand of squalane, produced from farnesene, is used in up to 300 cosmetics brands as a premium emollient. In late 2013, we commenced production of our first fragrance oil molecule, patchouli, which is marketed by our partner Firmenich for a range of applications, from perfumes to laundry detergents. We expect to develop and produce additional molecules in the coming years based on our current pipeline of over twenty products with over ten partner collaborations.

In order to deliver innovation to industries through our technology platform, we partner with companies through collaborative development and commercialization agreements. These partners include major energy and oil companies, such as Total, leading chemical suppliers such as BASF and Kuraray, flavors and fragrance players like Firmenich, and leading tire companies like Michelin. Our work has also been funded by the U.S. government, from the Department of Energy to the Defense Advanced Research Projects Agency (DARPA), to develop certain technologies and processes capable of improving our ability to produce alternatives to petroleum-sourced products.



We believe the combination of collaborations and product sales help us achieve our goal of becoming the world's leading renewable products company. Collaborations provide us with upfront funding to build strong technical partnerships resulting in the commercialization of innovative new products. This collaborative commercialization allows for a long-term revenue stream by capturing a share of the product gross margin sold to the target industries.

Making the World Better One Molecule at a Time

In early 2013, we began producing farnesene at our own biorefinery, located in the town of Brotas in southeastern Brazil. Last year we not only produced record farnesene volume but also significantly lowered our production costs. We believe farnesene can become a key building block molecule for a range of products and applications in the years to come. To encourage innovation and the product development process, we streamlined the process for obtaining Biofene samples with our e-commerce platform, farnesene.net.

Biofene is just the first commercial molecule produced with our technology at industrial scale. In 2013, we also witnessed the commencement of large-scale production of our first molecule, artemisinic acid, by our partner Sanofi, to help stabilize the market for the world's leading anti-malarial drug. We also began commercial production of our third commercial molecule, a fragrance oil, patchouli, which is being marketed by Firmenich for a range of applications, from perfumes to laundry detergents.

At Amyris, we know the first years of scale up are the toughest, and we are glad to have these early years of learning behind us. Today, thanks to the experience and confidence we have built through the years, we are able to predict industrial performance at our plant's 200,000-liter fermentors based on performance in our pint-sized lab fermentors in California.

A Decade of Progress and a Bright Future

Last year we celebrated our ten year anniversary. In 2003, our founders — a group of scientists from the University of California, Berkeley — formed a company, initially only on paper and with an office in a local coffee shop. They had an ambitious goal: to deliver on the promise of synthetic biology by finding a new way to produce an anti-malarial treatment that was limited in supply and volatile in price.

Through many lessons, we have a built a track record of delivering breakthrough technology over the last decade. Last year we continued this progress, delivering high-quality patchouli to our partner Firmenich, expanding the reach of farnesene from fuels to base oils to polymers for the tire industry and squalane for emollients, and seeing our partner, Sanofi, use artemisinic acid strains we helped develop to make one third of the world's leading cure for malaria.

We aim to end this decade with the world's leading brands no longer thinking of bio-based materials as an alternative but as the best way to solve their supply needs and to help them win in their markets. We believe brands will shift how they think about chemistry. Instead of making do with the chemistry they have, they will use synthetic biology to make the molecules they need to win in the market while doing less damage to our planet.

Our aspirational goal is for our products to be in 90% of all households in the developed world by the end of the decade. We are enabling our partners to access the ingredients they need at a lower cost and with a reliable supply. We believe we can disrupt the traditional chemical

Our Values

We have a team of the worlds leading scientists, engineers, chemists, marketers and collaborators who are united around a common purpose and committed to a simple set of values that guide the way we work.

Innovation
We are driven to accomplish the seemingly impossible. We use data, feedback and experience to seek powerful solutions to difficult problems facing our customers and the world. We embrace intelligent risk and are a learning organization.

Collaboration
We work with each other, our partners, and our customers to achieve exceptional results. We value, respect, and learn from each other as we strive for mutual success.

Amyrous
We love what we do and love what we make. We are passionate about having a positive impact. We have fun, keep a sense of humor and enjoy working together.

Integrity
We are honest, fair and ethical. We hold ourselves accountable and deliver on our commitments. We do what we say.

Safety
We demonstrate a deep regard for the safety and well-being of our people, our communities, our resources and our planet. We speak up courageously.

intermediate supply chain by delivering better and more sustainable solutions.

At Amyris, our mission is simple: We apply inspired science to deliver sustainable solutions for a growing world. In 2013, we made considerable progress and are confident, with the continued support of our shareholders, customers and partners, we can continue to deliver on the promise of our technology with a positive impact on our planet.

John G. Melo
President and Chief Executive Officer

FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our strategy, future production capacity and other aspects of our future operations, ability to improve our production efficiencies, future financial position, future revenues, projected costs, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part 1, Item 1A, "Risk Factors" of our enclosed Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2013

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from __________ to __________

Commission File Number: 001-34885

AMYRIS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**55-0856151**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
5885 Hollis Street, Suite 100, Emeryville, California	**94608**
(Address of principal executive office)	**(Zip Code)**

(510) 450-0761
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	The NASDAQ Stock Market LLC (NASDAQ Global Select Market)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one.)

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.): Yes ☐ No ☒

As of June 28, 2013, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the voting stock held by non-affiliates of the registrant was approximately $107.7 million, based on the closing price of the registrant's common stock on the NASDAQ Global Select Market on such date.

76,802,434 shares of the Registrant's common stock, par value $0.0001 per share, were outstanding as of February 28, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of registrant's proxy statement to be delivered to stockholders in connection with the registrant's 2014 Annual Meeting of Stockholders to be held on or about May 29, 2014 are incorporated by reference into Part III of this Form 10-K. The registrant intends to file its proxy statement within 120 days after its fiscal year end.

AMYRIS, INC.
ANNUAL REPORT ON FORM 10-K
For the Fiscal Year Ended December 31, 2013

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FORWARD-LOOKING STATEMENTS

This report on Form 10-K, including the sections entitled "Item 1. Business," "Item 1A. Risk Factors," and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements reflecting our current expectations that involve risks and uncertainties and which are subject to safe harbors under the Securities Act of 1933, as amended, or the Securities Act, and the Securities Exchange Act of 1934, as amended. These forward-looking statements include, but are not limited to, statements concerning our strategy, future production capacity and other aspects of our future operations, ability to improve our production efficiencies, future financial position, future revenues, projected costs, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.

TRADEMARKS

Amyris®, the Amyris logo, Biofene®, No Compromise®, Diesel de Cana™ and Neossance™ are trademarks or registered trademarks of Amyris, Inc. This report also contains trademarks and trade names of other business that are the property of their respective holders.

PART I

ITEM 1. BUSINESS

Overview

Amyris, Inc. (referred to as the “Company,” “Amyris,” “we,” “us,” or “our”) is a renewable products company focused on providing sustainable alternatives to a broad range of petroleum-sourced products. We developed innovative microbial engineering and screening technologies that modify the way microorganisms process sugars. We are using our proprietary synthetic biology platform to design microbes, primarily yeast, and use them as living factories in established fermentation processes to convert plant-sourced sugars into renewable hydrocarbons. We are developing, and, in some cases, already commercializing, products from these hydrocarbons in several target markets, including cosmetics, lubricants, flavors and fragrances, performance materials, and transportation fuels. We call these No Compromise® products because we design them to perform comparably to, or better than, currently available products.

We were founded in 2003 in the San Francisco Bay Area by a group of scientists from the University of California, Berkeley. Our first major milestone came in 2005 when, through a grant from the Bill & Melinda Gates Foundation, our scientists developed technology capable of creating microbial strains to produce artemisinic acid — a precursor of artemisinin, an effective anti-malarial drug. In 2008, we granted a royalty-free license (and a royalty-free sublicense from a license we received from the University of California) to this technology to the Institute of One World Health who then sublicensed it to Sanofi-Aventis, which currently distributes artemisinin-based anti-malarial drugs made through our technology.

Building on our success with semi-synthetic artemisinin to combat malaria, we have been applying our industrial synthetic biology platform to provide alternatives to a broad range of petroleum-sourced products. We have focused our development efforts on the production of Biofene®, our brand of renewable farnesene, a long-chain, branched liquid hydrocarbon molecule. Using Biofene as a building block molecule, we are developing a wide range of renewable products for our target markets.

While our platform is able to utilize a wide variety of feedstocks, we are focusing our large-scale production plans primarily on the use of Brazilian sugarcane as our feedstock because of its renewability, low cost and relative price stability. We have also been able to produce Biofene through the use of other feedstocks such as sugar beets, corn dextrose, sweet sorghum and cellulosic sugars.

Our first purpose-built, large-scale Biofene production plant commenced operations in southeastern Brazil in December 2012. This plant is in Brotas, in the state of São Paulo, Brazil, and is adjacent to an existing sugar and ethanol mill, Paraíso Bioenergia (or Paraíso). We have also commenced initial construction of a second large-scale production plant in Brazil, located at the São Martinho S.A. (or SMSA, a legal successor by spin-off of Usina São Martinho S.A.) sugar and ethanol mill also in the state of São Paulo, Brazil, and we intend to complete construction when market developments support the start-up of such plant.

Our business strategy is to focus on direct commercialization of renewable products while moving products in commodity industries, including our fuels and base oil lubricants products, into joint venture arrangements with established industry leaders. We believe this approach will permit access to the capital and resources necessary to support large-scale production and global distribution for our commodity products.

We are focused on building our renewable-product leadership position initially with squalane in cosmetics, niche fuel (diesel and jet) opportunities, fragrance oils, and farnesene for liquid polymer applications. We believe that success in these markets will pave the way to accessing larger markets and having a more significant impact in the longer term.

We were incorporated in 2003. We have two operating subsidiaries, Amyris Brasil Ltda. (formerly Amyris Brasil S.A.) (or Amyris Brasil), and Amyris Fuels LLC (or Amyris Fuels). Amyris Brasil oversees the establishment and expansion of our production in Brazil. Amyris Fuels was originally established to help us develop fuel distribution capabilities in the United States. We began selling fuels through Amyris

Fuels in June 2008. Amyris Fuels generated revenue from the sale of ethanol and reformulated ethanol-blended gasoline to wholesale customers through a network of terminals in the eastern United States. In the third quarter of 2012, we transitioned out of the ethanol and reformulated ethanol-blended gasoline business, though we continue to maintain the Amyris Fuels subsidiary for activities related to renewable fuel sales.

Our Business Strategy

Petroleum is a fundamental building block for many products, such as consumer products, chemicals, plastics and transportation fuels that are essential to modern economies. Recently, the increased demand for petroleum in the face of limited supply, supply chain uncertainties and negative environmental impacts have created challenges to the current petroleum infrastructure. As a result, there have been many attempts to create products comparable to petroleum derivatives without these drawbacks. However, initial approaches have faced a number of challenges that have limited their success, including exposure to volatile feedstock pricing, questionable environmental sustainability, limited product portfolio, and dependency on government policy.

Our objective is to become the leading provider of renewable, high-performance alternatives to selected petroleum-sourced chemicals and fuels. By leveraging our synthetic biology platform, our partners' know-how, and our experience in industrial fermentation, our products are designed to enable our customers to reduce the environmental impact of their products without compromising performance, and, in some cases, our renewable products provide superior performance to the petroleum-sourced products they are replacing.

Key elements of our strategy include:

1. ***Leveraging our technology platform to improve efficiency***. We continue applying synthetic biology, primarily our strain engineering platform, to lower the cost of production of our products through improvements in yields and other production process efficiencies. We do this with our industrial platform for yeast strain development at our world-class laboratories. We also support scale up to commercial production in two pilot plant facilities and a demonstration production facility, as well as at various contract manufacturing locations.

2. ***Accelerating development through collaborations***. In order to accelerate the development of new technologies, production methods or products, we enter into collaborative research, development and commercialization agreements, such as our existing agreements with Total Energies Nouvelles Activités USA, SAS (or Total), Firmenich SA (or Firmenich), Cosan US, Inc. (or Cosan), Kuraray Co., Ltd. (or Kuraray), and Manufacture Francaise de Pneumatiques Michelin (or Michelin). We have also entered into partnerships with the U.S. government to develop certain technologies and processes capable of improving our ability to produce alternatives to petroleum-sourced products.

3. ***Delivering cost efficient manufacturing***. Building on our breakthrough technology and experience gained from production through third party contract manufacturing, we built, commissioned and are now operating our own large-scale Biofene production plant in Brotas, in the state of São Paulo, Brazil. We opted to focus on Brazilian sugarcane as the feedstock to support our production ramp because of its renewability, low-cost and relative price stability. As we develop cost efficient manufacturing in our first production facility, we expect to work selectively with other Brazilian sugar and ethanol producers to build additional facilities adjacent to their existing mills, thereby reducing the capital required to establish and scale our production operations.

4. ***Targeting product markets to maximize returns***. We have begun to commercialize our products derived from Biofene primarily in select specialty chemical markets characterized by higher-margin, lower-volume products, where we believe we can earn positive gross margins with current production process efficiencies. For example, in 2011 we initiated sales of squalane, a cosmetic emollient produced from Biofene. At the end of 2013, we estimate that we achieved a 18% market share in the global squalane market. We have also established sales channels to certain niche diesel markets in metropolitan bus fleets in Brazil to generate revenue while building the know-how and credibility as a reliable fuel supplier. As we lower our production costs through

technological and manufacturing improvements, we intend to expand into broader, lower-margin, higher volume commodity product markets, such as the broad-based fuels market and base oil lubricants markets, through joint venture arrangements.

Our Breakthrough Technology

Our synthetic biology platform enables us to modify the genetic pathways of microorganisms, primarily yeast, to turn them into living factories to produce target molecules for which we believe there may be significant market opportunities. In addition to using our synthetic biology platform to identify and improve strains of microbes to produce target molecules, we are using our technology platform to develop production processes that we believe will allow us to scale to commercial levels.

The primary biological pathway within the microbe that we currently use to produce our target molecules is the isoprenoid pathway. Isoprenoids constitute a large, diverse class of organic chemicals with current product applications in a wide range of industries, including specialty chemicals and fuels. With this pathway, we can potentially produce thousands of different isoprenoid molecules.

The key steps in our strain engineering and scale-up process have been as follows:

Identifying target molecules. We start our process by identifying, usually based on input from collaborators, a commercial application where we can deliver a No Compromise solution that we want to pursue. We identify the key molecular properties that are essential to product performance in a specific commercial application and then analyze the chemical structures that drive those key performance characteristics. Finally, we identify target molecules or derivatives of molecules that are comprised of these key chemical structures and that may be produced by our yeast strains.

Developing initial strains. Once we have chosen a target molecule, we identify the steps required for its production in a biological pathway. We then seek to design a pathway to produce the target, either directly or by producing a molecule that can, through simple chemical steps, be synthesized, or converted, into the target. Once this pathway is identified, we undertake to engineer it into our yeast strains by employing the processes discussed below.

Improving strain performance and process development. After we have established a pathway and verified that it can produce the target molecule, the yeast strain must be improved to increase the level of efficiency of production. Initially, we focus primarily on *yield*, a measure of the amount of product produced by a defined amount of sugar as the means to improve strain output. As we advance in our scale up and commercial scale process development, we also seek to improve production output through improvements in strain *productivity*, the rate at which our product is produced by a given yeast strain, and *titer*, the concentration of product in the fermentation broth. In addition, we seek to develop processes to improve production recovery efficiency, including separation efficiency, which is the amount of product that is captured from a fermentation run, cycle-time, which is the time needed to run a full fermentation cycle, and the evolution of batch process methods to semi-continuous and continuous production methods.

Moving production from lab to commercial scale. Once we have established a pathway and verified that it can produce the target molecule, the yeast strain must be improved to increase the level of efficiency of production. We design our lab scale two-liter fermenters to mimic the conditions found in larger scale fermentation so that our findings may translate predictably from lab scale to pilot, demonstration and commercial scale. In addition to our lab scale fermenters, we have operating pilot plants in our facilities in Emeryville, California and Campinas, Brazil, as well as two 5,000-liter fermenters in our Campinas demonstration facility. To date, most of our efforts have focused on developing yeast strains to produce Biofene and, to a lesser extent, flavors and fragrances, with significant development efforts devoted to chemical synthesis of other products from Biofene. Though our technology platform allows us to develop yeast strains engineered to produce other target molecules, we expect to continue focusing most of our strain-engineering efforts on Biofene production and, to a lesser extent, selected specialty chemical ingredients, for the foreseeable future.

Our Industrial Production

Our industrial production operations generally involve two major steps. First, we produce a target molecule by means of an industrial fermentation process. In some cases this target molecule is itself the desired end product. In other cases, it must be converted into the desired end product by a second step where we use chemical synthesis of the initial target molecule to produce a final target molecule.

Commercial Production of Target Fermentation Molecules

We have initiated commercial production of Biofene, our initial fermentation molecule, at our purpose-built, large-scale Biofene production plant in Brotas, in the State of São Paulo, Brazil. Our Biofene production plant in Brotas is adjacent to an existing sugar and ethanol mill, Paraíso. Under our agreement with Paraíso, they will supply sugarcane juice and other utilities and we were responsible for construction (which commenced in August 2011) and operation of our Biofene production facility. Our Biofene production plant has six 200,000 liter production fermenters and was designed to process sugarcane juice, or its equivalent, from up to one million tons of raw sugarcane annually. In December 2012, following a successful commissioning phase, we began production of Biofene at the facility. Our first shipment of Biofene produced at the facility occurred on February 1, 2013.

Prior to operating our own facility, we relied on multiple contract manufacturing facilities in the United States, Brazil and Spain, which used 100,000 to 240,000 liter fermenters and multiple kinds of feedstock.

We have also advanced initial construction of a second large-scale production plant in Brazil, located at the SMSA sugar and ethanol mill also in the state of São Paulo, which we intend to complete when production economics support start-up of that plant. We entered into agreements with SMSA to establish the facility at SMSA, and to form a joint venture SMA Indústria Química S.A. (or SMA). We formed SMA in 2010, and commenced site preparation in December 2010 and civil construction in February 2011. In early 2012, we suspended construction of the plant pending completion and operation of our Brotas facility. The SMA plant is intended to provide a large-scale production facility to support our longer-term production plans.

Following the completion of our SMA plant, we expect to seek to expand our large-scale production capacity of intermediate molecules by entering into agreements with owners of additional sugar and ethanol mills in Brazil.

Chemical Finishing Process

In some cases, we perform additional chemical finishing steps to convert initial target molecules into other finished products, such as renewable squalane, lubricants, polymers and diesel. We have established an agreement with Glycotech Inc. (or Glycotech), for use of a Leland, North Carolina facility of Salisbury Partners, LLC to convert Biofene into squalane and other final products. We expect to enter into additional agreements with other chemical companies for finishing services to access flexible capacity and an array of services as we develop additional products.

Our Products

We are focused on developing a broad range of products to address five identified markets: cosmetics, flavors and fragrances, performance materials, lubricants and transportation fuels.

Cosmetics

Through basic chemical finishing steps, we are able to convert Biofene into squalane. Squalane is used today as an emollient in cosmetics and other personal care products. Squalane traditionally has been manufactured from olive oil or extracted from deep-sea shark liver oil. We believe Amyris-produced squalane offers a purity that is equal or superior to squalane derived from conventional sources. The relatively high price of squalane to date has meant that its use has been limited to small quantities in mass-market product formulations or to use in luxury products. We believe that we are capable of producing squalane at a price that would permit formulators to use squalane more broadly. We currently have agreements with several regional distributors, including in Japan, South Korea, North America, Brazil and Europe.

Lubricants

Base oils are the building blocks of lubricating oils and are currently derived from the crude oil refining process. Additives are materials added to base oils to change their properties, characteristics, or performance (e.g., anti-foam, anti-wear, corrosion inhibitor, detergent, dispersant, pour point depressant, anti-oxidant, or friction modifier). Lubricants are manufactured by combining a base oil with additives required by lubricant product applications, including engine oils, gear oils, hydraulic oils and turbine oils. Biofene may be chemically modified to serve as a base oil, additive, and/or lubricant. We believe the high-purity, synthetic base oil and additive molecules that can be made from Biofene could enable lubricant products to perform in harsh environments under extremes of temperature, moisture, dirt and/or wear.

In December 2010, we entered into an agreement with Cosan Combustíveis e Lubrificantes S.A. and Cosan S.A. Industria e Comércio (such Cosan entities and their affiliates, collectively or individually referred to as Cosan) to establish a joint venture for the worldwide development, production and commercialization of renewable base oils for the automotive, industrial and commercial lubricants markets. In March 2013, we expanded this collaboration to also include additives and lubricants for the automotive, industrial and commercial lubricants markets. The joint venture is operated through Novvi LLC (or Novvi). We anticipate that Novvi will source Biofene for its products initially from Amyris production facilities, and Amyris and Cosan, as co-owners of Novvi, would share its development, marketing and operating costs. In 2013, Novvi purchased initial quantities of Biofene for base oil production.

Flavors and Fragrances

We believe we are well situated to cost-effectively produce natural oils and aroma chemicals that are commonly used in the flavors and fragrances market. Many of the natural ingredients used in flavors and fragrances market are expensive because there is limited supply and the synthetic alternatives require complex chemical conversions. Amyris intends to offer flavors and fragrances companies a natural route to procure these ingredients without sacrificing cost or quality.

Currently, we are working with partners to develop a variety of flavors and fragrances ingredients that are either direct fermentation target molecules or derivatives of fermentation target molecules.

We plan to participate in the flavors and fragrance market by providing sustainable replacements that are high quality, reliably available, and competitively priced. To begin to develop our product offerings in this area, we have established various partnerships, including:

- A collaboration agreement with a global flavors and fragrances company for development and commercialization of various compounds for the flavors and fragrances market. Under this agreement, we conduct development activities and grant the partner licenses under our technology for commercialization of the compounds in exchange for funding and a profit sharing arrangement.

- A joint development and license agreement with a leading global creator of flavors and fragrances for consumer products for specified fragrance molecules. Under the terms of the multi-year agreement, we are jointly developing these fragrance ingredients for the flavors and fragrances market, and we and the collaboration partner will share in the economic value derived from these ingredients. The agreement provides for specified funding during the term of the agreement based upon the achievement of certain technical milestones.

Performance Materials

Polymers are used in the manufacture of thousands of products that incorporate plastics and other polymeric materials, and we believe Biofene has the potential to provide significant opportunities for development of renewable ingredients and additives for the polymer market.

In July 2011, we entered into a collaboration agreement with Kuraray to develop certain polymers from Biofene. Under the agreement, Kuraray will develop polymers from Biofene to replace or complement petroleum-derived molecules such as butadiene and isoprene in the production of specified classes of high-performing polymers. Upon successful completion of the technical development program for the first polymer, Amyris and Kuraray would enter into a supply agreement for Kuraray's exclusive use of Biofene in the manufacturing and commercialization of these polymer products.

Our synthetic biology platform is able to produce other building blocks with the potential to provide an array of new renewable polymers to serve a variety of markets. For instance, we are working with Michelin to produce renewable isoprene and acquired a muconic acid platform that allows us to expand to a broad range of plastic additives and other applications.

Transportation Fuels

We have selected diesel as our primary area of focus within the transportation fuels market because of its projected global demand growth, the lack of a scalable, competitive renewable product, and our belief that our fuel product has properties superior to those of existing renewable alternatives. In general, our renewable diesel is produced by the simple chemical step of the hydrogenation of Biofene. Hydrogenation is a common chemical process currently used in the production of numerous products, such as saturation of vegetable oils to make margarine.

In November 2011 and July 2012, we entered into amendments of our technology license, development, research and collaboration agreement with Total, and in November 2013 and December 2013 we established a joint venture with Total with respect to such programs to establish a renewable diesel development program as described in more detail below under "Total Collaboration Products." We are in the process of obtaining jet fuel certification as part of a two-year program to open up the market and launch jet fuel in partnership with Total. We are waiting approval for use of our fuel in the aviation industry by the American Society for Testing and Materials (or ASTM).

We have completed significant steps to validate our ability to produce a market-accepted diesel product. By design, our product is a hydrocarbon of similar size to many of the hydrocarbons in petroleum-sourced diesel fuel. Due to the similarity of its chemical composition to that of existing petroleum-sourced diesel, our product has the properties required of diesel fuel and thereby satisfies the ASTM D975 Table 1 specifications for petroleum-derived diesel fuel oils. The Environmental Protection Agency (or EPA), has registered our diesel for use as a 35% blend with petroleum diesel in highway vehicles and non-road equipment and we are working to obtain registration for a higher blend with petroleum diesel, as opposed to the typical 3-10% blend of other bio-diesel products with petroleum diesel. We have received required approvals with Brazilian Agência Nacional do Petróleo, Gas Natural e Biocombustíveis (or ANP) for specific uses of our fuel in Brazil and have registered our Diesel Fuel with the California Air Resources Board (or CARB) and are pursuing registration or approvals with other relevant regulatory bodies.

Our ability to enter the diesel market is also dependent upon our ability to continue to achieve the required regulatory approvals in the global markets in which we will seek to sell our diesel products. These approvals primarily involve clearance by the relevant environmental agencies in the particular jurisdiction. For instance, in 2013, the EPA registered farnesane as a new chemical substance under the Toxic Substances Control Act (or TSCA), clearing the way for us to manufacture and sell farnesane without restrictions in the United States. We must also be certified by a sufficient number of diesel engine manufacturers, vehicle manufacturers or operators of large trucking fleets so that our diesel will have an appropriately large and accessible addressable market. These certification processes include fuel analysis modeling and the testing of engines and their components to ensure that the use of our diesel fuel does not degrade performance or reduce the lifecycle of the engine or cause it to fail to meet emissions standards.

We have completed successful engine testing of our diesel fuel with Cummins Engine Company (or Cummins), and Mercedes-Benz Brasil at a blend of up to 10%, and our renewable diesel has received OEM engine warranties from Cummins, Volkswagen AG and Mercedes-Benz Brasil for demonstration purposes. We continue to work with other diesel engine manufacturers to qualify our product for use in their engines.

Total Collaboration Products

We have a license, development, research and collaboration agreement with Total that sets forth the terms for the research, development, production and commercialization of chemical and/or fuels products to be agreed on by the parties. The agreement establishes a multi-phased process through which compounds are identified, screened, selected for product feasibility studies, and then ultimately selected as a lead compound for development. To commercialize any strains and compounds that are developed, Amyris and Total expect to form one or more joint ventures, the first of which is the fuels joint venture described below. Both Amyris and Total retain certain rights to make covered products independently subject to making royalty payments to the non-producing party, and Total has certain rights to require Amyris to work on non-collaboration projects. We have retained rights to produce and commercialize products in the following markets: flavors and fragrances; cosmetics, pharmaceuticals, consumer packaged goods, food additives, and pesticides. The first programs we are focusing on with Total relate to renewable diesel and jet fuel and industrial lubricants; however, we and Total retain the right to propose product development programs under these agreements in the future.

In November 2011, we entered into an amendment of the collaboration agreement with Total with respect to development and commercialization of Biofene for diesel. This represented an expansion of the initial collaboration that the parties established in 2010, and established a global, exclusive collaboration for the development of Biofene for diesel and a framework for the creation of a joint venture to manufacture and commercialize Biofene for diesel. In July 2012 and December 2013, we entered into a series of agreements to establish a research and development program and form a joint venture to produce and commercialize Biofene-based diesel and jet fuels, which joint venture was formed in December 2013. With an exception for our fuels business in Brazil, the collaboration and joint venture establish the exclusive means for us to develop, produce and commercialize fuels from Biofene. We granted the joint venture exclusive licenses under certain of our intellectual property to make and sell joint venture products. We also granted the joint venture, in the event of a buy-out of our interest in the joint venture by Total (which Total is entitled to do under certain circumstances) a non-exclusive license to optimize or engineer yeast strains used by us to produce farnesene for the joint venture's diesel and jet fuels.

Product Distribution and Sales

We intend to distribute and sell our products either directly, through joint ventures, or with partners, depending on the market. For most chemical applications, we intend to sell directly to specialty chemical and consumer products companies. Generally, our collaboration agreements do not include any specific purchase obligations, and sales are contingent upon achievement of technical and commercial milestones. In addition, we expect to commercialize certain products, including fuels and base oils through joint venture arrangements with Total and Cosan, respectively.

Commencing in 2008, we began developing a fuels distribution network and distribution capabilities in the U.S. through Amyris Fuels. Through mid-2012, we purchased ethanol produced by third parties and gasoline and sold both pure ethanol and reformulated ethanol-blended gasoline to wholesale customers. For 2012, Mansfield Oil Company accounted for more than 10% of our reported revenues by virtue of its purchases of ethanol and reformulated ethanol-blended gasoline from Amyris Fuels. Collaboration revenues from Total also accounted for more than 10% of our reported revenues in 2012. Customers purchased ethanol and ethanol-blended gasoline from us under short-term agreements and spot transactions, and we generally did not have any contractual commitments from customers to purchase ethanol and ethanol-blended gasoline from us over any period of time. Nearly all of our customer revenue through the third quarter of 2012 came from the sale of ethanol and reformulated ethanol-blended gasoline, with the remainder of our revenues coming from collaborations and government grants and, more recently, sales of our renewable products. In the third quarter of 2012, we transitioned out of the ethanol and ethanol-blended gasoline business. We do not expect to be able to replace much of the revenue lost as a result of this transition, particularly in 2013, while we continue our efforts to establish a renewable products business. Renewable product sales to Nikko Chemicals Co., Ltd. (Nikko) and collaboration revenue from Firmenich, International Flavors & Fragrances Inc. (IFF), and the Defense Advanced Research Projects Agency (or DARPA) each accounted for more than 10% of our reported revenues in 2013.

Intellectual Property

Our success depends in large part upon our ability to obtain and maintain proprietary protection for our products and technologies, and to operate without infringing the proprietary rights of others. We seek to avoid the latter by monitoring patents and publications in our product areas and technologies to be aware of developments that may affect our business, and to the extent we identify such developments, evaluate and take appropriate courses of action. With respect to the former, our policy is to protect our proprietary position by, among other methods, filing for patent applications on inventions that are important to the development and conduct of our business with the U.S. Patent and Trademark Office (or the USPTO), and its foreign counterparts.

As of January 31, 2014, we had 247 issued U.S. and foreign patents and 327 pending U.S. and foreign patent applications that are owned by or licensed to us. We also use other forms of protection (such as trademark, copyright, and trade secret) to protect our intellectual property, particularly where we do not believe patent protection is appropriate or obtainable. We aim to take advantage of all of the intellectual property rights that are available to us and believe that this comprehensive approach provides us with a strong proprietary position.

Patents extend for varying periods according to the date of patent filing or grant and the legal term of patents in various countries where patent protection is obtained. The actual protection afforded by patent, which can vary from country to country, depends on the type of patent, the scope of its coverage and the availability of legal remedies in the country. See “Risk Factors — Risks Related to Our Business — Our proprietary rights may not adequately protect our technologies and product candidates.”

We also protect our proprietary information by requiring our employees, consultants, contractors and other advisers to execute nondisclosure and assignment of invention agreements upon commencement of their respective employment or engagement. Agreements with our employees also prevent them from bringing the proprietary rights of third parties to us. In addition, we also require confidentiality or material transfer agreements from third parties that receive our confidential data or materials.

Competition

We expect that our renewable products will compete with both the traditional, largely petroleum-based specialty chemical and fuels products that are currently being used in our target markets and with the alternatives to these existing products that established enterprises and new companies are seeking to produce.

Chemical Products

In the specialty chemical markets that we are initially seeking to enter, and in other chemical markets that we may seek to enter in the future, we will compete primarily with the established providers of chemicals currently used in products in these markets. Producers of these incumbent products include global oil companies, large international chemical companies and companies specializing in specific products, such as squalane or essential oils. We may also compete in one or more of these markets with products that are offered as alternatives to the traditional petroleum-based or other traditional products being offered in these markets.

Transportation Fuel Products

In the transportation fuels market, we expect to compete with independent and integrated oil refiners, advanced biofuels companies and biodiesel companies. Refiners compete with us by selling traditional fuel products and some are also pursuing hydrocarbon fuel production using non-renewable feedstocks, such as natural gas and coal, as well as processes using renewable feedstocks, such as vegetable oil and biomass. We also expect to compete with companies that are developing the capacity to produce diesel and other transportation fuels from renewable resources in other ways. These include advanced biofuels companies using specific enzymes that they have developed to convert cellulosic biomass, which is non-food plant material such as wood chips, corn stalks and sugarcane bagasse, into fermentable sugars. Similar to us, some companies are seeking to use engineered enzymes to convert sugars, in some cases from cellulosic biomass and in others from natural sugar sources, into renewable diesel and other fuels. Biodiesel companies convert vegetable oils and animal oils into diesel fuel and some are seeking to produce diesel and other transportation fuels using thermochemical methods to convert biomass into renewable fuels.

With the emergence of many new companies seeking to produce chemicals and fuels from alternative sources, we may face increasing competition from alternative fuels and chemicals companies. As they emerge, some of these companies may be able to establish production capacity and commercial partnerships to compete with us.

Competitive Factors

We believe the primary competitive factors in both the chemicals and fuels markets are:

- product price;
- product performance and other measures of quality;
- infrastructure compatibility of products;
- sustainability; and
- dependability of supply.

We believe that for our chemical products to succeed in the market, we must demonstrate that our products are comparable alternatives to existing products and to any alternative products that are being developed for the same markets based on some combination of product cost, availability, performance, and consumer preference characteristics. With respect to our diesel and other transportation fuels products, we believe that our product must perform as effectively as petroleum-based fuel, or alternative fuels, and be available on a cost-competitive basis. In addition, with the wide range of renewable fuels products under development, we must be successful in reaching potential customers and convincing them that ours are effective and reliable alternatives.

Environmental and Other Regulatory Matters

Our development and production processes involve the use, generation, handling, storage, transportation and disposal of hazardous chemicals and radioactive and biological materials. We are subject to a variety of federal, state, local and international laws, regulations and permit requirements governing the use, generation, manufacture, transportation, storage, handling and disposal of these materials in the United States, Brazil and other countries where we operate or may operate or sell our products in the future. These laws, regulations and permits can require expensive fees, pollution control equipment or operational changes to limit actual or potential impact of our technology on the environment and violation of these laws could result in significant fines, civil sanctions, permit revocation or costs from environmental remediation. We believe we are currently in substantial compliance with applicable environmental regulations and permitting. However, future developments including our commencement of commercial manufacturing of one or more of our products, more stringent environmental regulation, policies and enforcement, the implementation of new laws and regulations or the discovery of unknown environmental conditions may require expenditures that could have a material adverse effect on our business, results of operations or financial condition. See "Risk Factors — Risks Relating to Our Business — We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities."

The use of genetically-modified microorganisms (or GMMs), such as our yeast strains, is subject to laws and regulations in many countries. In the United States, the EPA regulates the commercial use of GMMs as well as potential products produced from the GMMs. Various states within the United States could choose to regulate products made with GMMs as well. While the strain of genetically modified yeast that we use, *S. cerevisiae*, is eligible for exemption from EPA review because the EPA recognizes it as posing a low risk we must satisfy certain criteria to achieve this exemption, including but not limited to use of compliant containment structures and safety procedures. In Brazil, GMMs are regulated by the National Biosafety Technical Commission (or the CTNBio) under its Biosafety Law No. 11.105-2005. We have obtained approval from CTNBio to generally use GMMs under specific conditions in our Campinas facilities and our production plant in Brotas for research and development purposes. In addition, we have received CTNBio approval for commercial use of a specific strain in our Brotas plant.

We expect to encounter GMM regulations in most if not all of the countries in which we may seek to make our products, however, the scope and nature of these regulations will likely be different from country to country. If we cannot meet the applicable requirements in countries in which we intend to produce our products using our yeast strains, then our business will be adversely affected. See "Risk Factors — Risks Related to Our Business — Our use of genetically-modified feedstocks and yeast strains to produce our products subjects us to risks of regulatory limitations and rejection of our products."

Our renewable chemical products may be subject to government regulations in our target markets. In the United States, the EPA administers the requirements of the TSCA, which regulates the commercial registration, distribution, and use of many chemicals. Before an entity can manufacture or distribute significant volumes of a chemical, it needs to determine whether that chemical is listed in the TSCA inventory. If the substance is listed, then manufacture or distribution can commence immediately. If not, then in most cases a "Chemical Abstracts Service" number registration and pre-manufacture notice must be filed with the EPA, which has up to 90 days to review the filing.

Our diesel and jet fuel is subject to regulation by various government agencies. In the United States, this includes the EPA and the CARB. In Brazil, this includes ANP. To date we have obtained registration with the EPA for the use of our diesel in the United States at a 35% blend rate with petroleum diesel. In addition, ANP has authorized the use of our diesel fuel at blend rates of 10% and 30% for specific transportation fleets. In Europe, we obtained Registration, Evaluation, Authorization, and Restriction of Chemical Substances (or REACH) registration for importing/manufacturing up to 1,000 metric tons of farnesane (our diesel fuel) per year and are pursuing data validation for greater volumes. Registration with each of these bodies is required for the sale and use of our fuels within their respective jurisdictions. Jet fuel (aviation turbine fuel) validation and specifications are subject to the ASTM International industry consensus process and the Brazilian ANP national adoption process. Our jet fuel must also be validated and supported by an applicable ASTM aviation turbine fuel standard. Any failure to achieve required validation and certification for our jet fuel could impair or delay our plans to introduce a jet fuel product in 2014, which would have a material adverse impact on our renewable product revenues for the year. In addition, for us to achieve full access to the United States fuels market for our fuel products, we will need to obtain EPA and CARB (and potentially other state agencies) certifications for our feedstock pathway and production facilities, including certification of a feedstock lifecycle analysis relating to greenhouse gas emissions. Any delay in obtaining these additional certifications could impair our ability to sell our renewable fuels to refiners, importers, blenders and other parties that produce transportation fuels as they comply with federal and state requirements to include certified renewable fuels in their products. See "Risk Factors — Risks Related to Our Business — We may not be able to obtain regulatory approval for the sale of our renewable products."

Research and Development

We devote substantial resources to our research and development efforts. As of February 28, 2014, our research and development organization included approximately 199 employees, 65 of whom held Ph.D.s. Our technology development is currently focused primarily on improving the performance of our production strains and on developing strains that produce new molecules. To facilitate the transfer of our fermentation technology to production, we operate pilot-scale fermentation facilities in both Emeryville, California and Campinas, Brazil, and transfer strains on a regular basis. Our process consists of a number of discrete steps including:

- identifying new target molecules
- creating new microbial strains capable of producing the target molecule
- increasing product yield and productivity from microbial strains through strain modification or fermentation improvements
- increasing efficiency of product separation and purification

- continuous translation of these steps from lab to commercial scale production.

Our research and development expenditures were approximately $56.1 million, $73.6 million, and $87.3 million for the fiscal years ended December 31, 2013, 2012 and 2011, respectively.

Employees

As of February 28, 2014, we had 392 full-time employees. Of these employees, 233 were in the United States and 159 were in Brazil. Except for labor union representation for Brazil-based employees based on labor code requirements in Brazil, none of our employees is represented by a labor union or is covered by a collective bargaining agreement. We have never experienced any employment-related work stoppages and consider relations with our employees to be good.

Financial Information About Geographic Areas

Financial information regarding revenues and long-lived assets by geographic area is included in Note 15, "Reporting Segments" in "Notes to Consolidated Financial Statements" included in this Form 10-K.

Business Background and Available Information

We organized our business in July 2003 as a California corporation under the name Amyris Biotechnologies, Inc. and have maintained our headquarters and research facilities in the San Francisco Bay Area since that time. In June 2010, we reincorporated in Delaware and changed our name to Amyris, Inc. We commenced research activities in 2005, focusing on the development of an alternative source of artemisinic acid for the treatment of malaria and launched research efforts for production of Biofene in 2006. In 2008, we began to sell third party ethanol to wholesale customers through our Amyris Fuels subsidiary, which generated revenue from the sale of ethanol and reformulated ethanol-blended gasoline to wholesale customers through a network of terminals in the eastern United States. We completed our planned transition out of the ethanol and ethanol-blended gasoline business in the third quarter of 2012, though we continue to maintain the Amyris Fuels subsidiary for activities related to renewable fuel sales. We first established a presence in Brazil in 2008 through the opening of laboratories in Campinas. Our corporate headquarters are located at 5885 Hollis Street, Suite 100, Emeryville, CA 94608, and our telephone number is (510) 450-0761. Our website address is www.amyris.com. The information contained in or accessible through our website or contained on other websites is not deemed to be part of this report on Form 10-K.

We are subject to the filing requirements of the Securities Exchange Act of 1934. Therefore, we file periodic reports, proxy statements and other information with the Securities and Exchange Commission. Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the Securities and Exchange Commission at 100 F Street, NE, Washington, D.C. 20549. You may obtain information regarding the operation of the Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330. In addition, the Securities and Exchange Commission maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 available free of charge through a link on the Investors section of our website located at www.amyris.com (under "Financial Information-SEC Filings") as soon as reasonably practicable after they are filed with or furnished to the Securities and Exchange Commission.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information set forth in this Annual Report on Form 10-K, which could materially affect our business, financial condition or future results. If any of the following risks actually occurs, our business, financial condition, results of operations and future prospects could be materially and adversely harmed. The trading price of our common stock could decline due to any of these risks, and, as a result, you may lose all or part of your investment.

Risks Related to Our Business

We have incurred losses to date, anticipate continuing to incur losses in the future and may never achieve or sustain profitability.

We have incurred significant losses in each year since our inception and believe that we will continue to incur losses and negative cash flow from operations into at least 2014. As of December 31, 2013, we had an accumulated deficit of $821.4 million and had cash, cash equivalents and short term investments of $8.3 million. We have significant outstanding debt and contractual obligations related to purchase commitments, as well as capital and operating leases. As of December 31, 2013, our debt totaled $152.1 million, net of discount of $27.9 million, of which $6.4 million matures within the next twelve months. In January 2014, we closed the issuance of an additional $34.0 million of debt pursuant to agreements entered into in 2013. In addition, our debt agreements contain various covenants, including restrictions on business that could cause us to be at risk of defaults. We expect to incur additional costs and expenses related to the continued development and expansion of our business, including construction and operation of our manufacturing facilities, contract manufacturing, research and development operations, and operation of our pilot plants and demonstration facility. There can be no assurance that we will ever achieve or sustain profitability on a quarterly or annual basis.

We have limited experience producing our products at commercial scale and may not be able to commercialize our products to the extent necessary to sustain and grow our current business.

To commercialize our products, we must be successful in using our yeast strains to produce target molecules at commercial scale and at a commercially viable cost. If we cannot achieve commercially-viable production economics for enough products to support our business plan, including through establishing and maintaining sufficient production scale and volume, we will be unable to achieve a sustainable integrated renewable products business. Virtually all of our production capacity is through a purpose-built, large-scale production plant in Brotas, Brazil. This plant commenced operations in 2013, and scaling and running the plant has been, and continues to be, a time-consuming, costly, uncertain and expensive process. Given our limited experience commissioning and operating our own manufacturing facilities and our limited financial resources, we cannot be sure that we will be successful achieving production economics that allow us to meet our plans for commercialization of various products we intend to offer. In addition, to date we have only produced Biofene at the Brotas plant. Our attempts to scale production of new molecules at the plant is subject to uncertainty and risk. For example, even to the extent we successfully complete product development in our laboratories and pilot and demonstration facilities, and at contract manufacturing facilities, we may be unable to translate such success to large-scale, purpose-built plants. If this occurs, our ability to commercialize our technology will be adversely affected and we may be unable to produce and sell any significant volumes of our products. Also, with respect to products that we are able to bring to market, we may not be able to lower the cost of production, which would adversely affect our ability to sell such products profitably.

We will require significant inflows of cash from financing and collaboration transactions to fund our anticipated operations and may not be able to obtain such financing and collaboration funding on favorable terms, if at all.

Our planned 2014 and 2015 working capital needs and our planned operating and capital expenditures for 2014 and 2015 are dependent on significant inflows of cash from existing and new collaboration partners and cash contribution from growth in renewable product sales, as well as additional funding from new joint ventures or other collaborations, and may also require additional funding from equity financings, credit facilities or loans, especially to the extent that we are unable to ramp up positive gross margin product sales or close on sufficient funding from existing and new collaboration partners. We will continue to need to fund our research and development and related activities and to provide working capital to fund production, storage, distribution and other aspects of its business. Some of our existing anticipated financing sources, such as research and development collaborations, are subject to the risk that we cannot meet milestones or are not yet subject to definitive agreements or mandatory funding commitments and, if needed, we may not be able to secure additional types of financing in a timely manner or on reasonable terms, if at all.

In 2013, we completed several equity and convertible debt financings to provide us with cash resources to pursue our business plans. In August 2013, we entered into an agreement with Total and Maxwell (Mauritius) Pte Ltd, (or Temasek), to sell up to $73.0 million in convertible promissory notes in private placements over a period of up to 24 months from the date of signing (referred to as the August 2013 Financing). The August 2013 Financing was divided into two tranches (one for $42.6 million and one for $30.4 million), each with differing closing conditions. Of the total possible purchase price in the financing, $60.0 million was to be paid in the form of cash by Temasek ($35.0 million in the first tranche and up to $25.0 million in the second tranche) and $13.0 million was to be paid by cancellation of outstanding convertible promissory notes held by Total in connection with its exercise of pro rata rights ($7.6 million in the first tranche and $5.4 million in the second tranche). In October 2013, the Company amended the agreement for the August 2013 Financing to include entities affiliated with FMR LLC (referred to as the Fidelity Entities) as additional investors for the first tranche in the principal amount of $7.6 million, and to proportionally increase the amount acquired by exchange and cancellation of outstanding convertible promissory notes held by Total to $14.6 million ($9.2 million in the first tranche and up to $5.4 million in the second tranche). Prior to the closing of the first tranche of the August Financing, Temasek advanced $35.0 million of financing through the purchase of a senior bridge note (referred to as the Temasek Bridge Note) due at the first closing. Also in October 2013, we completed the initial closing of the first tranche of the August 2013 Financing, issuing a total of $51.8 million in convertible promissory notes for cash proceeds of $7.6 million and cancellation of outstanding promissory notes and convertible promissory notes of $44.2 million, of which $35.0 million resulted from the cancellation of the Temasek Bridge Note. In December 2013, we agreed to sell an additional $3.0 million of senior convertible notes in the second tranche of the August 2013 Financing to funds affiliated with Wolverine Asset Management (or Wolverine) and we elected to call $25.0 million in additional funds from Temasek pursuant to its previous commitment to purchase such amount of convertible promissory notes in the second tranche. Additionally, in December 2013, we agreed to sell approximately $6.0 million of convertible promissory notes in the second tranche to Total through cancellation of the same amount of principal of previously outstanding convertible notes held by Total (in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation of indebtedness). In January 2014, we completed the offering of such convertible promissory notes in the second tranche.

The terms of the August 2013 Financing include significant potential reductions in the conversion price for the notes if we do not meet certain performance milestones and other conditions. These conditions, if triggered, could result in further reductions to the conversion price that would cause significant additional dilution to our stockholders if the notes are ultimately converted. Furthermore, if not converted, we may not have sufficient cash to repay the notes when they become due, which could result in insolvency and related issues. In addition, we were required to agree to significant covenants that have an impact on our ability to engage in certain transactions. For example, the purchase agreement for the August 2013 Financing (referred to as the August 2013 SPA) requires us to obtain the consent of a majority of the purchasers in the financing before completing any change-of-control transaction, or purchasing assets in one transaction or a series of related transactions in an amount greater than $20.0 million, in each case while the notes are outstanding. We also agreed to provide the purchasers with pro rata rights under which they could cancel up to the full amount of outstanding notes to pay for equity securities if we raise additional financing during the term of the notes, which could delay or prevent us from obtaining additional financing if the purchasers do not support it.

To the extent we obtain funding through the issuance of additional equity securities, our existing stockholders will suffer dilution. For example, in 2013, we completed private placements of our common stock that resulted in the issuance of approximately 6.6 million shares of our common stock. Also, in 2013, including the August 2013 Financing and research and development-related funding, we issued approximately $72.6 million in senior convertible promissory notes that are convertible into common stock. In June 2013 and July 2013 we issued an aggregate $30.0 million of convertible promissory notes with a conversion price of $3.08 per share pursuant to our arrangement with Total for research an development-related funding. In October 2013, we issued $51.8 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.44, and in December 2013, we agreed to issue approximately $34.0 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.87, each as part of the August Financing. The placement of $34.0

million of senior unsecured convertible notes closed in January 2014. Through 2015, we may issue up to an aggregate of $21.7 million in additional unsecured senior convertible promissory notes, with a conversion price of $7.0682 per share, under the agreements with Total described below under the risk factor, "Our relationship with our strategic partner, Total, may have a substantial impact on our company." Furthermore, under the convertible note financing approved by the stockholders of the Company in September 2013, we may issue up to an additional $3.2 million in convertible promissory notes at an initial conversion price of $2.44, and up to an additional $20.96 million in convertible promissory notes at a conversion price of $2.87. In addition, in connection with the initial closing of the August 2013 Financing, we issued a warrant to Temasek to purchase 1,000,000 shares of our common stock at an exercise price of $0.01 per share, exercisable only if Total converts certain preexisting convertible promissory notes.

In addition to dilution, to the extent we issue convertible promissory notes and similar instruments, we would become subject to various covenants, including restrictions on our business, that could cause us to be at risk of defaults. For example, the convertible notes we issued in 2012, 2013 and early 2014 contain various covenants, including restrictions on the amount of debt we are permitted to incur, a loan and security agreement we entered into in March 2014 included covenants regarding fund raising, cash flows and revenues, and the convertible notes or other debt we may issue in connection with future debt financings could contain similar covenants.

In addition to debt and equity financing, we depend on collaboration funding to support our operating expenses. While part of this funding is committed based on existing collaboration agreements, our 2014 business plan depends on identifying and obtaining funding under additional collaborations that are not yet subject to any definitive agreement or are not yet identified. In addition, some of our existing anticipated collaboration funding is subject to our achievement of milestones or other funding conditions. If we cannot secure sufficient collaboration funding to support our operating expenses in excess of cash contributions from product sales and existing debt and equity financing, in order to raise sufficient funds to finance our ongoing operations, we may need to issue additional preferred and discounted equity, agree to onerous covenants, grant further security interests in our assets, enter into collaboration and licensing arrangements that require us to relinquish commercial rights or grant licenses on terms that are not favorable to us, or any or all of these possibilities. If we fail to secure such funding, we could be forced to curtail our operations, which would have a material adverse effect on our ability to continue with our business plans and on our status as a going concern.

If we are unable to raise additional financing, or if other expected sources of funding are delayed or not received, we would take the following actions as early as the second quarter of 2014 to support our liquidity needs through the remainder of 2014 and into 2015:

- Effect significant headcount reductions in the United States and in Brazil, particularly with respect to both general and administrative employees and other employees not connected to critical or contracted activities.
- Shift our focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.
- Reduce our expenditures for third party contractors, including consultants, professional advisors and other vendors.
- Suspend operations at our pilot plants and demonstration facilities.
- Reduce or delay uncommitted capital expenditures, including non-essential lab equipment and information technology projects.

The contingency cash plan contemplating these actions is designed to save an estimated $25.0 million to $35.0 million over the next twelve months. Implementing this plan could have a material negative impact on our ability to continue our business as currently contemplated, including, without limitation, delays or failures in its ability to:

- Achieve planned production levels;
- Develop and commercialize products within planned timelines or at planned scales; and

- Continue other core activities.

Furthermore, any inability to scale-back operations as necessary, and any unexpected liquidity needs, could create pressure to implement more severe measures. Such measures could have a material adverse effect on our ability to meet contractual requirements, including obligations to maintain manufacturing operations, and increase the severity of the consequences described above.

If our major production facilities do not successfully commence or scale up operations, our customer relationships, business and results of operations may be adversely affected.

A substantial component of our planned production capacity in the near and long term depends on successful operations at our initial and planned large-scale production plants in Brazil. We are in the early stages of operating our first purpose-built, large-scale production plant in Brotas, Brazil and may complete construction of certain other facilities in the coming years. Delays or problems in the construction, start-up or operation of these facilities will cause delays in our ramp-up of production and hamper our ability to reduce our production costs. Delays in construction can occur due to a variety of factors, including regulatory requirements and our ability to fund construction and commissioning costs. Once our large-scale production facilities are built, we must successfully commission them and they must perform as we have designed them. If we encounter significant delays, cost overruns, engineering issues, contamination problems, equipment or raw material supply constraints, unexpected equipment maintenance requirements, safety issues, work stoppage or other serious challenges in bringing these facilities online and operating them at commercial scale, we may be unable to produce our initial renewable products in the time frame we have planned. For example, we are planning to start using our plant at Brotas to produce molecules beyond Biofene. To date, we have only produced Biofene at the plant. In order to produce additional molecules at Brotas, we are required to perform thorough transition activities, and modify the design of the plant. Any modifications to the production plant could cause complications in the start-up and operations of the plant, which could result in delays or failures in production. We may also need to continue to use contract manufacturing sources more than we expect (e.g., if the modifications to the Brotas plant are not successful or have a negative impact on the plant's operations), which would reduce our anticipated gross margins and may prevent us from accessing certain markets for our products. Further, if our efforts to increase (or complete and commence, as the case may be) production at these facilities are not successful, other mill owners in Brazil or elsewhere may decide not to work with us to develop additional production facilities, demand more favorable terms or delay their commitment to invest capital in our production.

Our reliance on the large-scale production plant in Brotas, Brazil subjects us to execution and economic risks.

Our decision to focus our efforts for production capacity on the manufacturing facility in Brotas, Brazil means that we will have limited manufacturing sources for our products in 2014 and beyond. Accordingly, any failure to establish operations at that plant could have a significant negative impact on our business, including our ability to achieve commercial viability for our products. With the facility in Brotas, Brazil, we are, for the first time, operating a commercial fermentation and separation facility. We are inexperienced at operating plants and may face unexpected difficulties associated with the operation of the plant. For example, we have in the past, at certain contract manufacturing facilities, encountered significant delays and difficulties in ramping up production based on contamination in the production process, problems with plant utilities, lack of automation and related human error, issues arising from process modifications to reduce costs and adjust product specifications, and other similar challenges. Such challenges could arise in our plant in Brotas, Brazil, and we cannot be certain that we will be able to remedy them quickly or effectively enough to achieve commercially viable near-term production costs and volumes.

As part of our arrangement to build the plant in Brotas, Brazil we have an agreement with Paraíso Bioenergia to purchase from Paraíso Bioenergia sugarcane juice corresponding to a certain number of tons of sugarcane per year, along with specified water and vapor volumes. Until this annual volume is reached, we are restricted from purchasing sugarcane juice for processing in the facility from any third party, subject to limited exceptions, unless we pay the premium to Paraíso Bioenergia that we would have paid if we bought the juice from them. As such, we will be relying on Paraíso Bioenergia to supply such juice and utilities on a timely basis, in the volumes we need, and at competitive prices. If a third party can offer superior prices and Paraíso Bioenergia does not consent to our purchasing from such third party, we would be required to pay Paraíso Bioenergia the applicable premium, which would have a negative impact on our production cost. Furthermore, we agreed to pay a price for the juice that is based on the lower of the cost of two other products produced by Paraíso Bioenergia using such juice, plus a premium. Paraíso Bioenergia may not want to sell sugarcane juice to us if the price of one of the other products is substantially higher than the one setting the price for the juice we purchase. While the agreement provides that Paraíso Bioenergia would have to pay a penalty to us if it fails to supply the agreed-upon volume of juice for a given month, the penalty may not be enough to compensate us for the increased cost if third-party suppliers do not offer competitive prices. Also, if the prices of the other products produced by Paraíso Bioenergia increase, we could be forced to pay those increased prices for production without a related increase in the price at which we can sell our products, reducing or eliminating any margins we can otherwise achieve. If in the future these supply terms no longer provide a viable economic structure for the operation in Brotas, Brazil we may be required to renegotiate our agreement, which could result in manufacturing disruptions and delays.

Furthermore, as we continue to scale up production of our products, both through contract manufacturers and at our large-scale production plant in Brotas, Brazil, we may be required to store increasing amounts of our products for varying periods of time and under differing temperatures or other conditions that cannot be easily controlled, which may lead to a decrease in the quality of our products and their utility profiles and could adversely affect their value. If our stored products degrade in quality, we may suffer losses in inventory and incur additional costs in order to further refine our stored products or we may need to make new capital investments in shipping, improved storage or sales channels and related logistics.

Our joint venture with São Martinho S.A. subjects us to certain legal and financial terms that could adversely affect us.

We have various agreements with SMSA that contemplate construction of another large-scale manufacturing facility as a joint venture in Brazil. Under these agreements, we are responsible for designing and managing the construction project, and are responsible for the initial construction costs. We projected the construction costs of the project to be approximately $100.0 million. While we completed a significant portion of the construction of the plant before 2012, we delayed further construction and commissioning of the plant while we constructed and commissioned our production plant in Brotas, Brazil and we expect to continue to defer the SMA project for the near term based on economic considerations and to allow us to focus on operations at our production plant in Brotas, Brazil. We entered into an amendment to the joint venture agreement with SMSA in February 2014 which updates and documents certain preexisting business plan requirements related to the start-up of construction at the plant and sets forth, among other things, (i) the extension of the deadline for the commencement of operations at the joint venture operated plant to no later than 18 months following the construction of the plant, which shall occur no later than March 31, 2017, and (ii) the extension of an option held by SMSA to build a second large-scale farnesene production facility to no later than December 31, 2018 with the commencement of operations at such second facility to occur no later than April 1, 2019. While SMSA was obligated to contribute up to approximately R$61.8 million (approximately US$26.4 million based on the exchange rate as of December 31, 2013) to the construction of the original plant, such contributions depended on, among other things, successful commencement of operations at the plant. Notwithstanding the February 2014 amendment to the joint venture agreement, based on our shifting manufacturing priorities and uncertainty regarding financing availability, we cannot currently predict exactly when or if our facility at SMSA will be completed or commence commercial operations, which means that SMSA's anticipated contribution will continue to be delayed and may never occur. SMSA holds rights with respect to the termination and acquisition of our interests in SMA. For instance, if Amyris Brasil becomes controlled, directly or indirectly, by a competitor of SMSA, then SMSA has the right to acquire our interest in the joint venture and if SMSA becomes controlled, directly or indirectly, by a competitor of ours, then we have the right to sell our interest in the joint venture to SMSA. In either case, the purchase price is to be determined in accordance with the joint venture agreements, as amended, and we would continue to have the obligation to acquire products produced by the joint venture for the remainder of the term of the supply agreement then in effect even though we might no longer be involved in the joint venture's management.

If we are ultimately successful in establishing the plant at SMSA, the agreements governing the joint venture subject us to terms that may not be favorable to us under certain conditions. For example, we are required to purchase the output of the joint venture for the first four years at a price that guarantees the return of SMSA's investment plus a fixed surcharge rate. We may not be able to sell the output at a price that allows us to achieve anticipated, or any, level of profitability on the product we acquire under these terms. Similarly, the return that we are required to provide the joint venture for products after the first four years may have an adverse effect on the profitability we achieve from acquiring the mill's output. Additionally, we are required to purchase the output of the joint venture regardless of whether we have a customer for such output, and our results of operations and financial condition would be adversely affected if we are unable to sell the output that we are required to purchase.

Loss or termination of contract manufacturing relationships could harm our ability to meet our production goals.

As we have focused on building and commissioning our own plant and improving our production economics, we have reduced our use of contract manufacturing and have terminated relationships with some of our contract manufacturing partners. The failure to have multiple available supply options for farnesene could create a risk for us if a single source or a limited number of sources of manufacturing runs into operational issues. In addition, if we are unable to secure the services of contract manufacturers when and as needed, we may lose customer opportunities and the growth of our business may be impaired. We cannot be sure that contract manufacturers will be available when we need their services, that they will be willing to dedicate a portion of their capacity to our projects, or that we will be able to reach acceptable price and other terms with them for the provision of their production services. If we shift priorities and adjust anticipated production levels (or cease production altogether) at contract manufacturing facilities, such adjustments or cessations could also result in disputes or otherwise harm our business relationships with contract manufacturers. In addition, reducing or stopping production at one facility while increasing or starting up production at another facility generally results in significant losses of production efficiency, which can persist for significant periods of time. Also, in order for production to commence under our contract manufacturing arrangements, we generally must provide equipment, and we cannot be assured that such equipment can be ordered or installed on a timely basis, at acceptable costs, or at all. Further, in order to establish new manufacturing facilities, we need to transfer our yeast strains and production processes from lab to commercial plants controlled by third parties, which may pose technical or operational challenges that delay production or increase our costs.

Our use of contract manufacturers exposes us to risks relating to costs, contractual terms and logistics.

While we have commenced commercial production at the Brotas, Brazil plant, we continue to commercially produce, process and manufacture some specialty molecules through the use of contract manufacturers, and we anticipate that we will continue to use contract manufacturers for the foreseeable future for chemical conversion and production of end-products and, to mitigate cost and volume risks at our large-scale production facilities, for production of Biofene and other fermentation target compounds. Establishing and operating contract manufacturing facilities requires us to make significant capital expenditures, which reduces our cash and places such capital at risk. For example, based on an evaluation of our assets associated with contract manufacturing facilities and anticipated levels of use of such facilities, we recorded a loss on purchase commitments and write off of production assets of approximately $9.4 million in the year ended December 31, 2013. Also, contract manufacturing agreements contain terms that commit us to pay for capital expenditures and other costs incurred or expected to be earned by the plant operators and owners, which can result in contractual liability and losses for us even if we terminate a particular contract manufacturing arrangement or decide to reduce or stop production under such an arrangement. For example, in June 2013, we entered into a termination agreement with a contract manufacturer that required us to make payments totaling $8.8 million in 2013, of which $3.6 million was to satisfy outstanding obligations and $5.2 million was in lieu of additional payments otherwise owed.

The locations of contract manufacturers can pose additional cost, logistics and feedstock challenges. If production capacity is available at a plant that is remote from usable chemical finishing or distribution facilities, or from customers, we will be required to incur additional expenses in shipping products to other locations. Such costs could include shipping costs, compliance with export and import controls, tariffs and additional taxes, among others. In addition, we may be required to use feedstock from a particular region for a given production facility. The feedstock available in a particular region may not be the least expensive or most effective feedstock for production, which could significantly raise our overall production cost o reduce our product's quality until we are able to optimize the supply chain.

If we are unable to reduce our production costs, we may not be able to produce our products at competitive prices and our ability to grow our business will be limited.

Currently, our costs of production are not low enough to allow us to offer many of our planned products at competitive prices relative to alternatives available in the market. Our production costs depend on many factors that could have a negative effect on our ability to offer our planned products at competitive prices, including, in particular, our ability to establish and maintain sufficient production scale and volume, and feedstock cost. For example, see "We have limited experience producing our products and commercial scale and may not be able to commercialize our products to the extent necessary to sustain and grow our current business," "Our manufacturing operations require sugar feedstock, and the ability to obtain such feedstock in sufficient quantities or in a timely manner, or at reasonable prices, may limit our ability to produce products profitably or at all," and "The price of sugarcane and other feedstocks can be volatile as a result of changes in industry policy and may increase the cost of production of our products."

We face financial risk associated with scaling up production to reduce our production costs. To reduce per-unit production costs, we must increase production to achieve economies of scale and to be able to sell our products with positive margins. However, if we do not sell production output in a timely manner or in sufficient volumes, our investment in production will harm our cash position and generate losses. Additionally, we may incur added costs in storage and we may face issues related to the decrease in quality of our stored products, which could adversely affect the value of such products. Since achieving competitive product prices generally requires increased production volumes and our manufacturing operations and cash flows from sales are in their early stages, we have had to produce and sell products at a loss in the past, and expect to continue to do so as we build our business. If we are unable to achieve adequate revenues from a combination of product sales and other sources, we may not be able to invest in production and we may not be able to pursue our business plans.

Key factors beyond production scale and feedstock cost that impact our production costs include yield, productivity, separation efficiency and chemical process efficiency. Yield refers to the amount of the desired molecule that can be produced from a fixed amount of feedstock. Productivity represents the rate at which our product is produced by a given yeast strain. Separation efficiency refers to the amount of desired product produced in the fermentation process that we are able to extract and the time that it takes to do so. Chemical process efficiency refers to the cost and yield for the chemical finishing steps that convert our target molecule into a desired product. In order to successfully enter transportation fuels and certain chemical markets, we must produce those products at significantly lower costs, which will require both substantially higher yields than we have achieved to date and other significant improvements in production efficiency, including in productivity and in separation and chemical process efficiencies. There can be no assurance that we will be able to make these improvements or reduce our production costs sufficiently to offer our planned products at competitive prices, and any such failure could have a material adverse impact on our business and prospects.

Our ability to establish substantial commercial sales of our products is subject to many risks, any of which could prevent or delay revenue growth and adversely impact our customer relationships, business and results of operations.

There can be no assurance that our products will be approved or accepted by customers, that customers will choose our products over competing products, or that we will be able to sell our products profitably at prices and with features sufficient to establish demand. The markets we have entered first are primarily those for specialty chemical products used by large consumer products or specialty chemical companies. In entering these markets, we have sold and we intend to sell our products as alternatives to chemicals currently in use, and in some cases the chemicals that we seek to replace have been used for many years. The potential customers for our molecules generally have well developed manufacturing processes and arrangements with suppliers of the chemical components of their products and may have a resistance to changing these processes and components. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers, influenced by consumer preference, manufacturing considerations such as process changes and capital and other costs associated with transitioning to alternative components, supplier operating history, established business relationships, regulatory issues, product liability and other factors, many of which are unknown to, or not well understood by, us. Satisfying these processes may take many months or years. If we are unable to convince these potential customers (and the consumers who purchase products containing such chemicals) that our products are comparable to the chemicals that they currently use or that the use of our products is otherwise to their benefits, we will not be successful in entering these markets and our business will be adversely affected.

In order for our diesel fuel or jet fuel to be accepted in various countries around the world, a significant number of diesel engine and jet engine manufacturers or operators of large trucking or jet fleets, as the case may be, must determine that the use of our fuels in their equipment will not invalidate product warranties and that they otherwise regard our diesel fuel or jet fuel as an acceptable fuel so that our diesel will have an appropriately large and accessible addressable market. In addition, we must successfully demonstrate to these manufacturers that our fuel does not degrade the performance or reduce the life cycle of their engines or cause them to fail to meet applicable emissions standards. These certification processes include fuel analysis modeling and the testing of engines and their components to ensure that the use of our diesel fuel or jet fuel does not degrade performance or reduce the lifecycle of the engine or cause them to fail to meet applicable emissions standards.

Additionally, we may be subject to product safety testing and may be required to meet certain product safety standards. Meeting these suitability or safety standards can be a time consuming and expensive process, and we may invest substantial time and resources into such qualification efforts without ultimately securing approval. To date, our diesel fuel has achieved limited approvals from certain engine manufacturers, but we cannot be assured that other engine or vehicle manufacturers or fleet operators, will approve usage of our fuels. To distribute our diesel fuel, we must also meet requirements imposed by pipeline operators and fuel distributors. If these operators impose volume limitations on the transport of our fuels, our ability to sell our fuels may be impaired. Our ability to sell a jet fuel product is subject to similar types of qualification requirements as diesel (although the jet fuel qualification process is generally more rigorous, time consuming and expensive than for diesel).

Our ability to enter the fuels market is also dependent upon our ability to continue to achieve the required regulatory approvals in the global markets in which we will seek to sell our fuel products. These approvals primarily involve clearance by the relevant environmental agencies in the particular jurisdiction and are described below under the risk factors, "Our use of genetically-modified feedstocks and yeast strains to produce our products subjects us to risks of regulatory limitations and rejection of our products," "We may not be able to obtain regulatory approval for the sale of our renewable products," and "We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities."

We expect to face competition for our specialty chemical and transportation fuels products from providers of petroleum-based products and from other companies seeking to provide alternatives to these products, and if we cannot compete effectively against these companies or products we may not be successful in bringing our products to market or further growing our business after we do so.

We expect that our renewable products will compete with both the traditional, largely petroleum-based specialty chemical and fuels products that are currently being used in our target markets and with the alternatives to these existing products that established enterprises and new companies are seeking to produce.

In the specialty chemical markets that we are initially seeking to enter, and in other chemical markets that we may seek to enter in the future, we will compete primarily with the established providers of chemicals currently used in products in these markets. Producers of these incumbent products include global oil companies, large international chemical companies and companies specializing in specific products, such as squalane or essential oils. We may also compete in one or more of these markets with products that are offered as alternatives to the traditional petroleum-based or other traditional products being offered in these markets.

In the transportation fuels market, we expect to compete with independent and integrated oil refiners, advanced biofuels companies and biodiesel companies. Refiners compete with us by selling traditional fuel products and some are also pursuing hydrocarbon fuel production using non-renewable feedstocks, such as natural gas and coal, as well as processes using renewable feedstocks, such as vegetable oil and biomass. We also expect to compete with companies that are developing the capacity to produce diesel and other transportation fuels from renewable resources in other ways. These include advanced biofuels companies using specific enzymes that they have developed to convert cellulosic biomass, which is non-food plant material such as wood chips, corn stalks and sugarcane bagasse, into fermentable sugars. Similar to us, some companies are seeking to use engineered enzymes to convert sugars, in some cases from cellulosic biomass and in others from natural sugar sources, into renewable diesel and other fuels. Biodiesel companies convert vegetable oils and animal oils into diesel fuel and some are seeking to produce diesel and other transportation fuels using thermochemical methods to convert biomass into renewable fuels.

With the emergence of many new companies seeking to produce chemicals and fuels from alternative sources, we may face increasing competition from alternative fuels and chemicals companies. As they emerge, some of these companies may be able to establish production capacity and commercial partnerships to compete with us. If we are unable to establish production and sales channels that allow us to offer comparable products at attractive prices, we may not be able to compete effectively with these companies.

We believe the primary competitive factors in both the chemicals and fuels markets are:

- product price;
- product performance and other measures of quality;
- infrastructure compatibility of products;
- sustainability; and
- dependability of supply.

The oil companies, large chemical companies and well-established agricultural products companies with whom we compete are much larger than us, have, in many cases, well developed distribution systems and networks for their products, have valuable historical relationships with the potential customers we are seeking to serve and have much more extensive sales and marketing programs in place to promote their products. In order to be successful, we must convince customers that our products are at least as effective as the traditional products they are seeking to replace and we must provide our products on a cost-competitive basis with these traditional products and other available alternatives. Some of our competitors may use their influence to impede the development and acceptance of renewable products of the type that we are seeking to produce.

We believe that for our chemical products to succeed in the market, we must demonstrate that our products are comparable alternatives to existing products and to any alternative products that are being developed for the same markets based on some combination of product cost, availability, performance, and consumer preference characteristics. With respect to our diesel and other transportation fuels products, we believe that our product must perform as effectively as petroleum-based fuel, or alternative fuels, and be available on a cost-competitive basis. In addition, with the wide range of renewable fuels products under development, we must be successful in reaching potential customers and convincing them that ours are effective and reliable alternatives.

Our relationship with our strategic partner, Total, has a substantial impact on our company.

We have a license, development, research and collaboration agreement with Total, under which we may develop, produce and commercialize products with Total. Under this agreement, Total has a right of first negotiation with us with respect to exclusive commercialization arrangements that we would propose to enter into with third parties, as well as the right to purchase any of our products on terms not less favorable than those offered to or received by us from third parties in any market where Total or its affiliates have a significant market position. These rights might inhibit potential strategic partners or potential customers from entering into negotiations with us about future business opportunities. Total also has the right to terminate this agreement if we undergo a sale or change of control to certain entities, which could discourage a potential acquirer from making an offer to acquire us.

In other agreements with Total related to their original investment in our capital stock, for as long as Total owns 10% of our voting securities, it has rights to an exclusive negotiation period if our Board of Directors decides to sell our company. Total also has the right to designate one director to serve on our Board of Directors. Also, in connection with Total's investments, our certificate of incorporation includes a provision that excludes Total from prohibitions on business combinations between Amyris and an "interested stockholder." These provisions could have the effect of discouraging potential acquirers from making offers to acquire us, and give Total more access to the Company than other stockholders if Total decides to pursue an acquisition.

Additionally, in connection with subsequent investments by Total, we granted Total, among other investors, a right of first investment if we propose to sell securities in a private placement financing transaction. With these rights, Total and other investors may subscribe for a portion of any new financing and require us to comply with certain notice periods, which could discourage other investors from participating, or cause delays, in our ability to close such a financing. Until June 30, 2014, Total also has a right to cancel up to approximately $9.8 million in convertible promissory notes previously issued to Total to exercise certain pro rata rights. To the extent Total exercises this right, it will reduce the cash proceeds we may realize from the relevant financing. Under agreements signed in July 2012, Total previously had the right to cancel up to $30.0 million of such convertible promissory notes, but has since, in financings that closed in December 2012, October 2013, December 2013 and January 2014, used approximately $20.2 million of such $30.0 million.

Our joint venture with Total limits our ability to independently develop and commercialize Biofene-based diesel and jet fuels.

In July 2012 and December 2013, we entered into a series of agreements to establish a research and development program and form a joint venture to produce and commercialize Biofene-based diesel and jet fuels. With an exception for our fuels business in Brazil, the collaboration and joint venture establish the exclusive means for us to develop, produce and commercialize fuels from Biofene. We granted the joint venture exclusive licenses under certain of our intellectual property to make and sell joint venture products. We also granted the joint venture, in the event of a buy-out of our interest in the joint venture by Total (which Total is entitled to do under certain circumstances described below) a non-exclusive license to optimize or engineer yeast strains used by us to produce farnesene for the joint venture's diesel and jet fuels. As a result of these licenses, Amyris generally no longer has an independent right to make or sell Biofene fuels outside of Brazil. If, for any reason, the joint venture is not fully supported or is not successful and the joint venture does not allow us to pursue Biofene-based fuels independently, this joint venture arrangement could impair our ability to develop and commercialize such fuels, which could have a material adverse effect on our business and long term prospects. For example, these arrangements could adversely affect our ability to enter or expand in these markets on terms that would otherwise be more favorable to us independently or with third parties.

In addition to granting the joint venture exclusive licenses, we also agreed that, if we encounter certain financial hardship situations, such as bankruptcy, insolvency and debt defaults, or upon a change of control of Amyris, Total has a right to buy out our interest in the joint venture at fair market value. The agreements also provide Total with a right to buy out our interest in the joint venture in the event of a "deadlock" in negotiating agreements to establish an operational fuels joint venture following a decision to proceed with the next phase of the joint venture. In a situation where Total buys out our interest in the joint venture, it also has rights to buy our Brazil fuels business at fair market value. If Total were to exercise these rights, we would, in effect, relinquish rights to intellectual property exclusively licensed to the joint venture, and our ability to seek future revenue from Biofene in the fuels market would be adversely affected (or completely prevented). This could significantly reduce the value of our product offerings, and have a material adverse effect on our ability to grow our business in future years.

Total's collaboration funding is in the form of convertible promissory notes.

Our agreements with Total relating to our fuels collaboration created a convertible debt financing structure for funding the research and development program. The collaboration agreements contemplated approximately $105.0 million in financing for the collaboration, of which Total has funded $83.3 million to date. Total is expected to fund up to the remaining $21.7 million, with $10.85 million to be paid by July 2014 and $10.85 million to be paid by January 2015. If Total chooses not to continue participating at certain "Go/No-Go" decision points during the program, licenses to our technology would terminate, and the notes would remain outstanding and become payable at maturity unless otherwise converted in accordance with their terms. If Total chooses to continue the collaboration and makes a final decision to proceed with the operational fuels joint venture, Total is required to buy from Amyris 50% of the preferred shares (all of which are currently held by Amyris) of a related joint venture in exchange for full settlement of principal and interest outstanding under the notes. If Total chooses to continue the collaboration and makes a final decision to proceed with the joint venture only for jet fuel, Total is required to buy from Amyris 50% of the preferred shares of the joint venture in exchanges for the settlement of 30% of the principal and interest outstanding under the notes. The remaining notes would continue to be outstanding and payable upon maturity unless otherwise converted in accordance with the terms of the notes.

We cannot be certain that Total will choose to continue funding the program or ultimately opt to participate in an operational fuels joint venture. If Total were to decide not to participate further in the collaboration or not to proceed with the operational fuels joint venture, it would not be obligated to fund any further amounts (which would reduce our anticipated near-term collaboration revenues), and, as noted above, the outstanding notes representing amounts paid by Total to date would remain outstanding and become payable or convertible into our common stock. If Total chooses to demand repayment of amounts funded under the notes following such a decision (or a portion of such notes based on a jet fuel-only decision), we may not be able to satisfy our obligations to repay the notes by the maturity date in March 2017, which could lead to defaults and our insolvency, and Total and other creditors could pursue collections claims against us. If the notes become convertible and Total chooses to convert them, the resulting issuance of common stock would be dilutive to other stockholders.

If we do not meet technical, development and commercial milestones in our collaboration agreements, our future revenue and financial results will be adversely impacted.

We have entered into a number of agreements regarding the further development of certain of our products and, in some cases, for ultimate sale of certain products to the customer under the agreement. None of these agreements affirmatively obligates the other party to purchase specific quantities of any products at this time, and most contain important conditions that must be satisfied before additional research and development funding or product purchases would occur. These conditions include research and development milestones and technical specifications that must be achieved to the satisfaction of our collaborators, which we cannot be certain we will achieve. If we do not achieve these contractual milestones, our revenues and financial results will be adversely affected.

We are subject to risks related to our reliance on collaboration arrangements to fund development and commercialization of our products.

For most product markets we are trying to address, we either have or are seeking collaboration partners to fund the research and development, commercialization and production efforts required for the target products. Typically we provide limited exclusive rights and revenue sharing with respect to the production and sale of particular types of products in specific markets in exchange for such up-front funding. These exclusivity, revenue-sharing and other similar terms limit our ability to commercialize our products and technology, and may impact the size of our business or our profitability in ways that we do not currently envision. In addition, revenues from these types of relationships are a key part of our cash plan for 2014 and beyond. If we fail to collect expected collaboration revenues, or to identify and add sufficient additional collaborations to fund our planned operations, we may be unable to fund our operations or pursue development and commercialization of our planned products. To achieve our collaboration revenue targets from year to year, we may be forced to enter into agreements that contain less favorable terms, including broader exclusivity provisions for commercial partners and a smaller financial stake in any successful ventures resulting from collaborations.

Our manufacturing operations require sugar feedstock, and the inability to obtain such feedstock in sufficient quantities or in a timely manner, or at reasonable prices, may limit our ability to produce our products profitably, or at all.

We anticipate that the production of our products will require large volumes of feedstock. We have relied on a mixture of feedstock sources for use at our contract manufacturing operations, including cane sugar, corn-based dextrose and beet molasses. For our large-scale production facilities in Brazil, we are relying primarily on Brazilian sugarcane. We cannot predict the future availability or price of these various feedstocks, nor can we be sure that our mill partners, which we expect to supply the sugarcane feedstock necessary to produce our products in Brazil, will be able to supply it in sufficient quantities or in a timely manner. Furthermore, to the extent we are required to rely on sugar feedstock other than Brazilian sugarcane, the cost of such feedstock may be higher than we expect, increasing our anticipated production costs. Feedstock crop yields and sugar content depend on weather conditions, such as rainfall and temperature. Weather conditions have historically caused volatility in the ethanol and sugar industries by causing crop failures or reduced harvests. Excessive rainfall can adversely affect the supply of sugarcane and other sugar feedstock available for the production of our products by reducing the sucrose content and limiting growers' ability to harvest. Crop disease and pestilence can also occur from time to time and can adversely affect feedstock growth, potentially rendering useless or unusable all or a substantial portion of affected harvests. With respect to sugarcane, our initial primary feedstock, seasonal availability and price, the limited amount of time during which it keeps its sugar content after harvest, and the fact that sugarcane is not itself a traded commodity, increases these risks and limits our ability to substitute supply in the event of such an occurrence. If production of sugarcane or any other feedstock we may use to produce our products is adversely affected by these or other conditions, our production will be impaired, and our business will be adversely affected.

The price of sugarcane and other feedstocks can be volatile as a result of changes in industry policy and may increase the cost of production of our products.

In Brazil, Conselho dos Produtores de Cana, Açúcar e Álcool (Council of Sugarcane, Sugar and Ethanol Producers), or Consecana, an industry association of producers of sugarcane, sugar and ethanol, sets market terms and prices for general supply, lease and partnership agreements for sugarcane. If Consecana makes changes to such terms and prices, this could result in higher sugarcane prices and/or a significant decrease in the volume of sugarcane available for the production of our products. Furthermore, if Consecana were to cease to be involved in this process, such prices and terms could become more volatile. Similar principles apply to pricing of other feedstocks as well. Any of these events could adversely affect our business and results of operations.

Our large-scale commercial production capacity is centered in Brazil, and our business will be adversely affected if we do not operate effectively in that country.

For the foreseeable future, we will be subject to risks associated with the concentration of essential product sourcing and operations in Brazil. The Brazilian government has changed in the past, and may change in the future, monetary, taxation, credit, tariff and other policies to influence the course of Brazil's economy. For example, the government's actions to control inflation have at times involved setting wage and price controls, adjusting interest rates, imposing taxes and exchange controls and limiting imports into Brazil. We have no control over, and cannot predict, what policies or actions the Brazilian government may take in the future. Our business, financial performance and prospects may be adversely affected by, among others, the following factors:

- delays or failures in securing licenses, permits or other governmental approvals necessary to build and operate facilities and use our yeast strains to produce products;
- rapid consolidation in the sugar and ethanol industries in Brazil, which could result in a decrease in competition;
- political, economic, diplomatic or social instability in or affecting Brazil;
- changing interest rates;
- tax burden and policies;
- effects of changes in currency exchange rates;
- exchange controls and restrictions on remittances abroad;
- inflation;

- land reform movements;
- changes in labor related policies;
- export or import restrictions that limit our ability to move our products out of Brazil or interfere with the import of essential materials into Brazil;
- changes in, or interpretations of foreign regulations that may adversely affect our ability to sell our products or repatriate profits to the United States;
- tariffs, trade protection measures and other regulatory requirements;
- successful compliance with United States and foreign laws that regulate the conduct of business abroad;
- an inability, or reduced ability, to protect our intellectual property in Brazil including any effect of compulsory licensing imposed by government action; and
- difficulties and costs of staffing and managing foreign operations.

We cannot predict whether the current or future Brazilian government will implement changes to existing policies on taxation, exchange controls, monetary strategy, labor relations, social security and the like, nor can we estimate the impact of any such changes on the Brazilian economy or our operations.

Our international operations expose us to the risk of fluctuation in currency exchange rates and rates of foreign inflation, which could adversely affect our results of operations.

We currently incur significant costs and expenses in Brazilian real and may in the future incur additional expenses in foreign currencies and derive a portion of our revenues in the local currencies of customers throughout the world. As a result, our revenues and results of operations are subject to foreign exchange fluctuations, which we may not be able to manage successfully. During the past few decades, the Brazilian currency in particular has faced frequent and substantial exchange rate fluctuations in relation to the United States dollar and other foreign currencies. There can be no assurance that the Brazilian real will not significantly appreciate or depreciate against the United States dollar in the future. We also bear the risk that the rate of inflation in the foreign countries where we incur costs and expenses or the decline in value of the United States dollar compared to those foreign currencies will increase our costs as expressed in United States dollars. For example, future measures by the Central Bank of Brazil to control inflation, including interest rate adjustments, intervention in the foreign exchange market and actions to fix the value of the real, may weaken the United States dollar in Brazil. Whether in Brazil or otherwise, we may not be able to adjust the prices of our products to offset the effects of inflation or foreign currency appreciation on our cost structure, which could increase our costs and reduce our net operating margins. If we do not successfully manage these risks through hedging or other mechanisms, our revenues and results of operations could be adversely affected.

Our use of genetically-modified feedstocks and yeast strains to produce our products subjects us to risks of regulatory limitations and rejection of our products.

The use of GMMs, such as our yeast strains, is subject to laws and regulations in many countries, some of which are new and some of which are still evolving. Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and GMMs could influence public acceptance of our technology and products. In the United States, the EPA, regulates the commercial use of GMMs as well as potential products produced from the GMMs. Various states or local governments within the United States could choose to regulate products made with GMMs as well. While the strain of genetically modified yeast that we currently use for the development and anticipate using for the commercial production of our target molecules, *S. cerevisiae*, is eligible for exemption from EPA review because it is recognized as posing a low risk, we must satisfy certain criteria to achieve this exemption, including but not limited to use of compliant containment structures and safety procedures, and we cannot be sure that we will meet such criteria in a timely manner, or at all. If exemption of *S. cerevisiae* is not obtained, our business may be substantially harmed. In addition to *S. cerevisiae*, we may seek to use different GMMs in the future that will require EPA approval. If approval of different GMMs is not secured, our ability to grow our business could be adversely affected.

In Brazil, GMMs are regulated by CTNBio. We have obtained approval from CTNBio to use GMMs in a contained environment in our Campinas facilities for research and development purposes as well as at a contract manufacturing facility in Brazil. In addition, we have obtained initial commercial approval from CTNBio for one of our current yeast strains. As we continue to develop new yeast strains and deploy our technology at new production facilities in Brazil, we will be required to obtain further approvals from CTNBio in order to use these strains in commercial production in Brazil. We may not be able to obtain approvals from relevant Brazilian authorities on a timely basis, or at all, and if we do not, our ability to produce our products in Brazil would be impaired, which would adversely affect our results of operations and financial condition.

In addition to our production operations in the United States and Brazil, we have been party to contract manufacturing agreements with parties in other production locations around the world, including Europe. The use of GMM technology is strictly regulated in the European Union, which has established various directives for member states regarding regulation of the use of such technology, including notification processes for contained use of such technology. We expect to encounter GMM regulations in most, if not all, of the countries in which we may seek to establish production capabilities and/or conduct sales to customers or end-use consumers, and the scope and nature of these regulations will likely be different from country to country. If we cannot meet the applicable requirements in other countries in which we intend to produce products using our yeast strains, or if it takes longer than anticipated to obtain such approvals, our business could be adversely affected.

We may not be able to obtain regulatory approval for the sale of our renewable products.

Our renewable chemical products may be subject to government regulation in our target markets. In the United States, the EPA administers the TSCA, which regulates the commercial registration, distribution, and use of many chemicals. Before an entity can manufacture or distribute significant volumes of a chemical, it needs to determine whether that chemical is listed in the TSCA inventory. If the substance is listed, then manufacture or distribution can commence immediately. If not, then in most cases a "Chemical Abstracts Service" number registration and pre-manufacture notice must be filed with the EPA, which has up to 180 days to review the filing. Some of the products we produce or plan to produce, such as farnesene (i.e., Biofene), farnesane (in diesel and new jet fuel applications) and squalane, are already in the TSCA inventory. We may not be able to expediently receive approval from the EPA to list future molecules we would like to make on the TSCA registry, resulting in delays or significant increases in testing requirements. A similar program exists in the European Union, called REACH. Under this program, we need to register our new products with the European Commission, and this process could cause delays or significant costs. To the extent that other geographies, such as Brazil, may rely on TSCA or REACH (or similar laws and programs) for chemical registration in their geographies, delays with the United States or European authorities may subsequently delay entry into these markets as well.

Our diesel and jet fuel is subject to regulation by various government agencies, including the EPA, CARB and ANP. To date, we have obtained registration with the EPA for the use of our diesel fuel in the United States. at a 35% blend rate with petroleum diesel. In addition, ANP has authorized the use our diesel fuel at blend rates of 10% and 30% for specific transportation fleets. In Europe, we obtained REACH registration for importing/manufacturing up to 1,000 metric tons of our diesel fuel per year and are pursuing data validation for greater volumes. Registration with each of these bodies is required for the sale and use of our fuels within their respective jurisdictions. Jet fuel (aviation turbine fuel) validation and specifications are subject to the ASTM International industry consensus process and the Brazilian ANP national adoption process. Our jet fuel must be validated and supported by an applicable ASTM aviation turbine fuel standard. Any failure to achieve required validation and certifications for our jet fuel could impair or delay our plans to introduce a jet fuel product in 2014, which would have a material adverse impact on our renewable product revenues for the year. In addition, for us to achieve full access to the United States fuels market for our fuel products, we will need to obtain EPA and CARB (and potentially other state agencies) certifications for our feedstock pathway and production facilities, including certification of a feedstock lifecycle analysis relating to greenhouse gas emissions. Any delay in obtaining these additional certifications could impair our ability to sell our renewable fuels to refiners, importers, blenders and other parties that produce transportation fuels as they comply with federal and state requirements to include certified renewable fuels in their products.

We expect to encounter regulations in most, if not all, of the countries in which we may seek to sell our renewable chemical and fuel products (and our customers may encounter similar regulations in selling end use products o consumers), and we cannot assure you that we (or our customers) will be able to obtain necessary approvals in a timely manner or at all. If our chemical and fuel products do not meet applicable regulatory requirements in a particular country or at all, then we (or our customers) may not be able to commercialize our products and our business will be adversely affected.

Changes in government regulations, including subsidies and economic incentives, could have a material adverse effect upon our business.

The market for renewable fuels is heavily influenced by foreign, federal, state and local government regulations and policies. Changes to existing or adoption of new domestic or foreign federal, state and local legislative initiatives that impact the production, distribution or sale of renewable fuels may harm our renewable fuels business. In the United States and in a number of other countries, regulations and policies encouraging production and use of alternative fuels have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline or diesel may cause demand for biofuels to decline and deter investment in the research and development of renewable fuels. The market uncertainty regarding this and future standards and policies may also affect our ability to develop new renewable products or to license our technologies to third parties and to sell products to our end customers. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations.

Concerns associated with renewable fuels, including land usage, national security interests and food crop usage, continue to receive legislative, industry and public attention. This attention could result in future legislation, regulation and/or administrative action that could adversely affect our business. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations.

Furthermore, the production of our products will depend on the availability of feedstock, especially sugarcane. Agricultural production and trade flows are subject to government policies and regulations. Governmental policies affecting the agricultural industry, such as taxes, tariffs, duties, subsidies, incentives and import and export restrictions on agricultural commodities and commodity products, can influence the planting of certain crops, the location and size of crop production, whether unprocessed or processed commodity products are traded, the volume and types of imports and exports, and the availability and competitiveness of feedstocks as raw materials. Future government policies may adversely affect the supply of feedstocks, restrict our ability to use sugarcane or other feedstocks to produce our products, and negatively impact our future revenues and results of operations or could encourage the use of feedstocks more advantageous to our competitors which would put us at a commercial disadvantage.

We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

We use hazardous chemicals and radioactive and biological materials in our business and such materials are subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials both in the United States and overseas. Although we have implemented safety procedures for handling and disposing of these materials and related waste products in an effort to comply with these laws and regulations, we cannot be sure that our safety measures will prevent accidental injury or contamination from the use, storage, handling or disposal of hazardous materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that violations of environmental, health and safety laws will not occur in the future as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present, or future laws could result in the imposition of fines, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. Liability under environmental laws can be joint and several, without regard to comparative fault and may be punitive in nature. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business.

A decline in the price of petroleum and petroleum-based products may reduce demand for many of our renewable products and may otherwise adversely affect our business.

We anticipate that most of our renewable products, and in particular our fuels, will be marketed as alternatives to corresponding petroleum-based products. If the price of oil falls, we may be unable to produce products that are cost-effective alternatives to petroleum-based products. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or prevent potential customers from entering into agreements with us to buy our products. During sustained periods of lower oil prices we may be unable to sell some of our products, which could materially and adversely affect our operating results.

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our revenues and results of operations could vary significantly from quarter to quarter because of a variety of factors, many of which are outside of our control. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. Factors that could cause our quarterly results of operations to fluctuate include:

- achievement, or failure, with respect to technology, product development or manufacturing milestones needed to allow us to enter identified markets on a cost effective basis;
- delays or greater than anticipated expenses associated with the completion or commissioning of new production facilities, or the time to ramp up and stabilize production following completion of a new production facility;
- impairment of assets based on shifting business priorities and working capital limitations;
- disruptions in the production process at any manufacturing facility;
- losses associated with producing our products as we ramp to commercial production levels;
- failure to recover value added tax (or VAT) that we currently reflect as recoverable in our financial statements (e.g., due to failure to meet conditions for reimbursement of VAT under local law);
- the timing, size and mix of sales to customers for our products;
- increases in price or decreases in availability of feedstock;
- the unavailability of contract manufacturing capacity altogether or at reasonable cost;
- exit costs associated with terminating contract manufacturing relationships;
- fluctuations in foreign currency exchange rates;
- gains or losses associated with our hedging activities;
- change in the fair value of derivative instruments;
- fluctuations in the price of and demand for sugar, ethanol, and petroleum-based and other products for which our products are alternatives;
- seasonal variability in production and sales of our products;
- competitive pricing pressures, including decreases in average selling prices of our products;
- unanticipated expenses associated with changes in governmental regulations and environmental, health, labor and safety requirements;
- reductions or changes to existing fuel and chemical regulations and policies;
- departure of executives or other key management employees resulting in transition and severance costs;
- our ability to use our net operating loss carryforwards to offset future taxable income;
- business interruptions such as earthquakes and other natural disasters;

- our ability to integrate businesses that we may acquire;
- our ability to successfully collaborate with business venture partners;
- risks associated with the international aspects of our business; and
- changes in general economic, industry and market conditions, both domestically and in our foreign markets.

As part of our operating plan for 2014, we are planning to keep our expenditures to be relatively consistent with prior year.

Due to the factors described above, among others, the results of any quarterly or annual period may not meet our expectations or the expectations of our investors and may not be meaningful indications of our future performance.

Loss of key personnel, including key management personnel, and/or failure to attract and retain additional personnel could delay our product development programs and harm our research and development efforts and our ability to meet our business objectives.

Our business involves complex, global operations across a variety of markets and requires a management team and employee workforce that is knowledgeable in the many areas in which we operate. As we continue to build our business, we will need to hire and retain qualified research and development, management and other personnel to succeed. The process of hiring, training and successfully integrating qualified personnel into our operations, in both the United States and Brazil, is a lengthy and expensive one. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products, particularly in Brazil. Our failure to hire and retain qualified personnel could impair our ability to meet our research and development and business objectives and adversely affect our results of operations and financial condition.

The loss of any key member of our management or key technical and operational employees, or the failure to attract or retain such employees could prevent us from developing and commercializing our products for our target markets and executing our business strategy. We also may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the renewable chemicals and fuels area, or due to the availability of personnel with the qualifications or experience necessary for our business. In addition, reductions to our workforce as part of cost-saving measures may make it more difficult for us to attract and retain key employees. If we do not maintain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to meet the demands of our collaborators and customers in a timely fashion or to support our internal research and development programs and operations. In particular, our product and process development programs are dependent on our ability to attract and retain highly skilled technical and operational personnel. Competition for such personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. All of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

Growth may place significant demands on our management and our infrastructure.

We have experienced, and expect to continue to experience, expansion of our business as we continue to make efforts to develop and bring our products to market. We have grown from 18 employees at the end of 2005 to 392 at February 28, 2014. Our growth and diversified operations have placed, and may continue to place, significant demands on our management and our operational and financial infrastructure. In particular, continued growth could strain our ability to:

- manage multiple research and development programs;
- operate multiple manufacturing facilities around the world;
- develop and improve our operational, financial and management controls;

- enhance our reporting systems and procedures;
- recruit, train and retain highly skilled personnel;
- develop and maintain our relationships with existing and potential business partners;
- maintain our quality standards; and
- maintain customer satisfaction.

Managing our growth will require significant expenditures and allocation of valuable management resources. If we fail to achieve the necessary level of efficiency in our organization as it grows, our business, results of operations and financial condition would be adversely impacted.

Our proprietary rights may not adequately protect our technologies and product candidates.

Our commercial success will depend substantially on our ability to obtain patents and maintain adequate legal protection for our technologies and product candidates in the United States and other countries. As of February 28, 2014, we had 248 issued United States and foreign patents and 326 pending United States and foreign patent applications that were owned by or licensed to us. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies and future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We apply for patents covering both our technologies and product candidates, as we deem appropriate. However, we may fail to apply for patents on important technologies or product candidates in a timely fashion, or at all. Our existing and future patents may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products or technologies. In addition, the patent positions of companies like ours are highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of patent claims has emerged to date in the United States and the landscape is expected to become even more uncertain in view of recent rule changes by the USPTO, the introduction of patent reform legislation in Congress and recent decisions in patent law cases by the United States Supreme Court. In addition, we obtained certain key United States patents using a procedure for accelerated examination recently implemented by the USPTO which requires special activities and disclosures that may create additional risks related to the validity or enforceability of the United States patents so obtained. The patent situation outside of the United States is even less predictable. As a result, the validity and enforceability of patents cannot be predicted with certainty. Moreover, we cannot be certain whether:

- we or our licensors were the first to make the inventions covered by each of our issued patents and pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- others will independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our or our licensors' patents will be valid or enforceable;
- any patents issued to us or our licensors will provide us with any competitive advantages, or will be challenged by third parties;
- we will develop additional proprietary products or technologies that are patentable; or
- the patents of others will have an adverse effect on our business.

We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Even if patents are issued, they may not be sufficient to protect our technology or product candidates. The patents we own or license and those that may be issued in the future may be challenged, invalidated, rendered unenforceable, or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages. In particular, United States patents we obtained using the USPTO accelerated examination program may introduce additional risks to the validity or enforceability of some or all of these specially-obtained United

States patents if validity or enforceability are challenged. Moreover, third parties could practice our inventions in territories where we do not have patent protection or in territories where they could obtain a compulsory license to our technology where patented. Such third parties may then try to import products made using our inventions into the United States or other territories. Additional uncertainty may result from potential passage of patent reform legislation by the United States Congress, legal precedent by the United States Federal Circuit and Supreme Court as they determine legal issues concerning the scope and construction of patent claims and inconsistent interpretation of patent laws by the lower courts. Accordingly, we cannot ensure that any of our pending patent applications will result in issued patents, or even if issued, predict the breadth, validity and enforceability of the claims upheld in our and other companies' patents.

Unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in the United States or may provide, today or in the future, for compulsory licenses. If competitors are able to use our technology, our ability to compete effectively could be harmed. Moreover, others may independently develop and obtain patents for technologies that are similar to, or superior to, our technologies. If that happens, we may need to license these technologies, and we may not be able to obtain licenses on reasonable terms, if at all, which could cause harm to our business.

We rely in part on trade secrets to protect our technology, and our failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We rely on trade secrets to protect some of our technology, particularly where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to maintain and protect. Our strategy for contract manufacturing and scale-up of commercial production requires us to share confidential information with our international business partners and other parties. Our product development collaborations with third parties, including with Total, require us to share confidential information, including with employees of Total who are seconded to Amyris during the term of the collaboration. While we use reasonable efforts to protect our trade secrets, our or our business partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, foreign courts are sometimes less willing than United States courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them.

We require new employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. Nevertheless, our proprietary information may be disclosed, or these agreements may be unenforceable or difficult to enforce. Additionally, trade secret law in Brazil differs from that in the United States which requires us to take a different approach to protecting our trade secrets in Brazil. Some of these approaches to trade secret protection may be novel and untested under Brazilian law and we cannot guarantee that we would prevail if our trade secrets are contested in Brazil. If any of the above risks materializes, our failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Third parties may misappropriate our yeast strains.

Third parties, including contract manufacturers, sugar and ethanol mill owners, other contractors and shipping agents, often have custody or control of our yeast strains. If our yeast strains were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to reproduce the yeast strains for their own commercial gain. If this were to occur, it would be difficult for us to challenge and prevent this type of use, especially in countries where we have limited intellectual property protection or that do not have robust intellectual property law regimes.

If we are sued for infringing intellectual property rights or other proprietary rights of third parties, litigation could be costly and time consuming and could prevent us from developing or commercializing our future products.

Our commercial success depends on our ability to operate without infringing the patents and proprietary rights of other parties and without breaching any agreements we have entered into with regard to our technologies and product candidates. We cannot determine with certainty whether patents or patent applications of other parties may materially affect our ability to conduct our business. Our industry spans several sectors, including biotechnology, renewable fuels, renewable specialty chemicals and other renewable compounds, and is characterized by the existence of a significant number of patents and disputes regarding patent and other intellectual property rights. Because patent applications can take several years to issue, there may currently be pending applications, unknown to us, that may result in issued patents that cover our technologies or product candidates. We are aware of a significant number of patents and patent applications relating to aspects of our technologies filed by, and issued to, third parties. The existence of third-party patent applications and patents could significantly reduce the coverage of patents owned by or licensed to us and limit our ability to obtain meaningful patent protection. If we wish to make, use, sell, offer to sell, or import the technology or compound claimed in issued and unexpired patents owned by others, we will need to obtain a license from the owner, enter into litigation to challenge the validity of the patents or incur the risk of litigation in the event that the owner asserts that we infringe its patents. If patents containing competitive or conflicting claims are issued to third parties and these claims are ultimately determined to be valid, we may be enjoined from pursing research, development, or commercialization of products, or be required to obtain licenses to these patents, or to develop or obtain alternative technologies.

If a third-party asserts that we infringe upon its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including:

- infringement and other intellectual property claims, which could be costly and time consuming to litigate, whether or not the claims have merit, and which could delay getting our products to market and divert management attention from our business;
- substantial damages for past infringement, which we may have to pay if a court determines that our product candidates or technologies infringe a third party's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our technologies or future products unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a third party, such third party may require us to pay substantial royalties or grant cross licenses to our patents or proprietary rights.

The industries in which we operate, and the biotechnology industry in particular, are characterized by frequent and extensive litigation regarding patents and other intellectual property rights. Many biotechnology companies have employed intellectual property litigation as a way to gain a competitive advantage. If any of our competitors have filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in interference proceedings declared by the relevant patent regulatory agency to determine priority of invention and, thus, the right to the patents for these inventions in the United States These proceedings could result in substantial cost to us even if the outcome is favorable. Even if successful, an interference proceeding may result in loss of certain claims. Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of the United States, to defend our intellectual property rights or as a result of alleged infringement of the rights of others, may divert management time from focusing on business operations and could cause us to spend significant resources, all of which could harm our business and results of operations.

Many of our employees were previously employed at universities, biotechnology, specialty chemical or oil companies, including our competitors or potential competitors. We may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel and be enjoined from certain activities. A loss of key research personnel or their work product could hamper or prevent our ability to commercialize our product candidates, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and demand on management resources.

We may need to commence litigation to enforce our intellectual property rights, which would divert resources and management's time and attention and the results of which would be uncertain.

Enforcement of claims that a third party is using our proprietary rights without permission is expensive, time consuming and uncertain. Significant litigation would result in substantial costs, even if the eventual outcome is favorable to us and would divert management's attention from our business objectives. In addition, an adverse outcome in litigation could result in a substantial loss of our proprietary rights and we may lose our ability to exclude others from practicing our technology or producing our product candidates.

The laws of some foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology and/or bioindustrial technologies. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Moreover, our efforts to protect our intellectual property rights in such countries may be inadequate.

Our products subject us to product-safety risks, and we may be sued for product liability.

The design, development, production and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. Our potential products could be used by a wide variety of consumers with varying levels of sophistication. Although safety is a priority for us, we are not always in control of the final uses and formulations of the products we supply or their use as ingredients. Our products could have detrimental impacts or adverse impacts we cannot anticipate. Despite our efforts, negative publicity about Amyris, including product safety or similar concerns, whether real or perceived, could occur, and our products could face withdrawal, recall or other quality issues. In addition, we may be named directly in product liability suits relating to our products, even for defects resulting from errors of our commercial partners, contract manufacturers or chemical finishers. These claims could be brought by various parties, including customers who are purchasing products directly from us or other users who purchase products from our customers. We could also be named as co-parties in product liability suits that are brought against the contract manufacturers or Brazilian sugar and ethanol mills with whom we partner to produce our products. Insurance coverage is expensive, may be difficult to obtain and may not be available in the future on acceptable terms. We cannot be certain that our contract manufacturers or the sugar and ethanol producers who partner with us to produce our products will have adequate insurance coverage to cover against potential claims. Any insurance we do maintain may not provide adequate coverage against potential losses, and if claims or losses exceed our liability insurance coverage, our business would be adversely impacted. In addition, insurance coverage may become more expensive, which would harm our results of operations.

During the ordinary course of business, we may become subject to lawsuits or indemnity claims, which could materially and adversely affect our business and results of operations.

From time to time, we may in the ordinary course of business be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker's compensation, employment discrimination, breach of contract, property damages, civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavorably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting. The process of implementing our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention of management. We cannot be certain that these measures will ensure that we maintain adequate controls over our financial processes and reporting in the future. In addition, to the extent we create joint ventures or have any variable interest entities and the financial statements of such entities are not prepared by us, we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in us adding monitoring and audit processes and increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future. This may be particularly true where we are establishing such entities with commercial partners that do not have sophisticated financial accounting processes in place, or where we are entering into new relationships at a rapid pace, straining our integration capacity. Additionally, if we do not receive the information from the joint venture or variable interest entity on a timely basis, this could cause delays in our external reporting. Even if we conclude, and our independent registered public accounting firm concurs, that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price. In addition, failure to comply with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed, and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business.

If the value of our goodwill or other intangible assets becomes impaired, it could materially reduce the value of our assets and reduce our net income for the year in which the related impairment charges occur.

We apply the applicable accounting principles set forth in the United States Financial Accounting Standards Board's Accounting Standards Codification to our intangible assets (including goodwill), which prohibits the amortization of intangible assets with indefinite useful lives and requires that these assets be reviewed for impairment at least annually. There are several methods that can be used to determine the estimated fair value of the in-process research and development acquired in a business combination. We have used the "income method," which applies a probability weighting that considers the risk of development and commercialization, to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, pricing of similar products, and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written off, as appropriate. If the carrying amount of the assets is greater than the measures of fair value, impairment is considered to have occurred and a write-down of the asset is recorded. Any finding that the value of our intangible assets has been impaired would require us to write-down the impaired portion, which could reduce the value of our assets and reduce our net income for the year in which the related impairment charges occur. As of December 31, 2013, we had a net carrying value of approximately $9.1 million in in-process research and development and goodwill associated with our acquisition of Draths Corporation.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code (or the Code), a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards (or NOLs), to offset future taxable income. If the Internal Revenue Service challenges our analysis that our existing NOLs are not subject to limitations arising from previous ownership changes, or if we undergo an ownership change, our ability to utilize NOLs could be limited by Section 382 of the Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code. Furthermore, our ability to utilize NOLs of companies that we may acquire in the future may be subject to limitations. For these reasons, we may not be able to utilize a material portion of the NOLs carryforward as of December 31, 2013, even if we attain profitability.

Loss of, or inability to secure government contract revenues could impair our business.

In early 2010, we were awarded an "Integrated Bio-Refinery" grant from the United States Department of Energy (or DOE). The terms of this grant made funds available to us through 2013 to leverage and expand our existing Emeryville, California pilot plant and support laboratories to develop United States-based production capabilities for renewable fuels and chemicals derived from sweet sorghum. In late 2010, we were selected as a sub-contractor in the National Advanced Biofuels Consortium (or NABC) Fermentation of Lignocellulosic Sugars (or FLS) grant funded by the DOE. The terms of this grant made funds available to us through 2013 to develop strains that consume C5 sugars and to demonstrate production of advanced biofuels from lignocellulosic sugars. In 2012, we entered into a Technology Investment Agreement with The Defense Advanced Research Projects Agency (or DARPA), under which we are performing certain research and development activities funded in part by DARPA. Generally, these agreements, as amended or modified, have fixed terms and may be terminated, modified or be subject to recovery of payments by the government agency under certain conditions (such as failure to comply with detailed reporting and governance processes or failure to achieve milestones). Under these agreements, we are also subject to audits, which can result in corrective action plans and penalties up to and including termination. If DARPA terminates its agreement with us, it could reduce our revenues which could harm our business. Additionally, we anticipate securing additional government contracts as part of our business plan for 2014 and beyond. If we are unable to secure such government contracts, it could harm our business.

Our headquarters and other facilities are located in an active earthquake zone, and an earthquake or other types of natural disasters affecting us or our suppliers could cause resource shortages and disrupt and harm our results of operations.

We conduct our primary research and development operations in the San Francisco Bay Area in an active earthquake zone, and certain of our suppliers conduct their operations in the same region or in other locations that are susceptible to natural disasters. In addition, California and some of the locations where certain of our suppliers are located have experienced shortages of water, electric power and natural gas from time to time. The occurrence of a natural disaster, such as an earthquake, drought or flood, or localized extended outages of critical utilities or transportation systems, or any critical resource shortages, affecting us or our suppliers could cause a significant interruption in our business, damage or destroy our facilities, production equipment or inventory or those of our suppliers and cause us to incur significant costs or result in limitations on the availability of our raw materials, any of which could harm our business, financial condition and results of operations. The insurance we maintain against fires, earthquakes and other natural disasters may not be adequate to cover our losses in any particular case.

Risks Related to Ownership of Our Common Stock

Our stock price may be volatile.

The market price of our common stock has been, and we expect it to continue to be, subject to significant volatility, and it has declined significantly from our initial public offering price. As of February 28, 2014, the reported closing price for our common stock on the NASDAQ Global Select Market was \$4.57 per share. Market prices for securities of early stage companies have historically been particularly volatile. Such fluctuations could be in response to, among other things, the factors described in this "Risk Factors" section or elsewhere in this report, or other factors, some of which are beyond our control, such as:

- fluctuations in our financial results or outlook or those of companies perceived to be similar to us;
- changes in estimates of our financial results or recommendations by securities analysts;
- changes in market valuations of similar companies;
- changes in the prices of commodities associated with our business such as sugar, ethanol and petroleum;
- changes in our capital structure, such as future issuances of securities or the incurrence of debt;
- announcements by us or our competitors of significant contracts, acquisitions or strategic alliances;
- regulatory developments in the United States, Brazil, and/or other foreign countries;
- litigation involving us, our general industry or both;
- additions or departures of key personnel;
- investors' general perception of us; and
- changes in general economic, industry and market conditions.

Furthermore, stock markets have experienced price and volume fluctuations that have affected, and continue to affect, the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market fluctuations, as well as general economic, political and market conditions, such as recessions, interest rate changes and international currency fluctuations, may negatively affect the market price of our common stock.

In the past, many companies that have experienced volatility and sustained declines in the market price of their stock have become subject to securities class action and derivative action litigation. We are currently involved in two such lawsuits, as described in more detail below in "ITEM 3. LEGAL PROCEEDINGS", and we may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

The concentration of our capital stock ownership with insiders will limit the ability to influence corporate matters.

As of February 28, 2014:

- our executive officers and directors and their affiliates (including Total) together held approximately 40% of our outstanding common stock;
- Total held approximately 17.7% of our outstanding common stock; and
- the two largest holders of outstanding common stock after Total (Temasek and Biolding Investment SA (or Biolding), each of whom has a designee on our Board of Directors) together held approximately 23.2% of our outstanding common stock.

This significant concentration of share ownership may adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. Also, these stockholders, acting together, will be able to control our management and affairs and matters requiring stockholder approval, including the election of directors and the approval of significant corporate transactions, such as mergers, consolidations or the sale of substantially all of our assets. Consequently, this concentration of ownership may have the effect of delaying or preventing a change of control, including a merger, consolidation or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if that change of control would benefit our other stockholders.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, our stock price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. In addition, certain of our equipment leases and credit facilities currently restrict our ability to pay dividends. Consequently, investors may need to rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase our common stock.

Anti-takeover provisions contained in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our certificate of incorporation and bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- a staggered board of directors;
- authorizing the board of directors to issue, without stockholder approval, preferred stock with rights senior to those of our common stock;
- authorizing the board of directors to amend our bylaws and to fill board vacancies until the next annual meeting of the stockholders;
- prohibiting stockholder action by written consent;
- limiting the liability of, and providing indemnification to, our directors and officers;
- eliminating the ability of our stockholders to call special meetings; and
- requiring advance notification of stockholder nominations and proposals.

Section 203 of the Delaware General Corporation Law prohibits, subject to some exceptions, "business combinations" between a Delaware corporation and an "interested stockholder," which is generally defined as a stockholder who becomes a beneficial owner of 15% or more of a Delaware corporation's voting stock, for a three-year period following the date that the stockholder became an interested stockholder. We have agreed to opt out of Section 203 through our certificate of incorporation, but our certificate of incorporation contains substantially similar protections to our company and stockholders as those afforded under Section 203, except that we have agreed with Total that it and its affiliates will not be deemed to be "interested stockholders" under such protections.

In addition, we have an agreement with Total, which provides that, so long as Total holds at least 10% of our voting securities, we must inform Total of any offer to acquire us or any decision of our Board of Directors to sell our company, and we must provide Total with information about the contemplated transaction. In such events, Total will have an exclusive negotiating period of fifteen business days in the event the Board of Directors authorizes us to solicit offers to buy Amyris, or five business days in the event that we receive an unsolicited offer to purchase us. This exclusive negotiation period will be followed by an additional restricted negotiation period of ten business days, during which we are obligated to continue to negotiate with Total and will be prohibited from entering into an agreement with any other potential acquirer.

These and other provisions in our amended and restated certificate of incorporation and our amended and restated bylaws that became effective upon the completion of our initial public offering under Delaware law and in our agreement with Total could discourage potential takeover attempts, reduce the price that investors might be willing to pay in the future for shares of our common stock and result in the market price of our common stock being lower than it would be without these provisions.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table provides the names, ages and offices of each of our executive officers as of February 28, 2013:

Name	Age	Position
Executive Officers:		
John Melo	47	Director, President and Chief Executive Officer
Joel Cherry, Ph.D.	53	President of Research and Development
Paulo Diniz	56	Interim Chief Financial Officer
Zanna McFerson	48	Chief Business Officer
Nicholas Khadder	40	General Counsel and Corporate Secretary

John Melo

John Melo has nearly three decades of combined experience as an entrepreneur and thought leader in the global fuels industry and technology innovation. Mr. Melo has served as our President and Chief Executive Officer and a director since January 2007 and our President since January 2008. Before joining Amyris, Mr. Melo served in various senior executive positions at BP Plc (formerly British Petroleum), one of the world's largest energy firms, from 1997 to 2006, most recently as President of U.S. Fuels Operations from 2004 until December 2006, and previously as Chief Information Officer of the refining and marketing segment from 2001 to 2003, Senior Advisor for e-business strategy to Lord Browne, BP Chief Executive, from 2000 to 2001, and Director of Global Brand Development from 1999 to 2000. Before joining BP, Mr. Melo was with Ernst & Young, an accounting firm, from 1996 to 1997, and a member of the management teams of several startup companies, including Computer Aided Services, a management systems integration company, and Alldata Corporation, a provider of automobile repair software to the automotive service industry. Mr. Melo currently serves on the board of directors of U.S. Venture, Inc. and Renmatix Inc., and also serves as Vice Chairman of the board of directors of BayBio. Mr. Melo was formerly an appointed member to the U.S. section of the U.S.-Brazil CEO Forum.

Joel Cherry, Ph.D.

Dr. Joel Cherry has served as our President of Research and Development since July 2011 and previously as our Senior Vice President of Research Programs and Operations since November 2008. Before joining Amyris, Dr. Cherry was Senior Director of Bioenergy Biotechnology at Novozymes, a biotechnology company focusing on development and manufacture of industrial enzymes from 1992 to November 2008. At Novozymes, he served in a variety of R&D scientific and management positions, including membership in Novozymes' International R&D Management team, and as Principal Investigator and Director of the BioEnergy Project, a U.S. Department of Energy-funded $18 million effort initiated in 2000. Dr. Cherry holds a Bachelor of Arts degree in Chemistry from Carleton College and a Doctor of Philosophy degree in Biochemistry from the University of New Hampshire.

Paulo Diniz

Paulo Diniz was named interim Chief Financial Officer in December 2013 after initially serving as the CEO of Amyris Brasil, starting in March 2011. Prior to joining Amyris, Mr. Diniz served as Chief Financial Officer of Bunge Brasil S.A., a wholly owned subsidiary of Bunge Ltd., an agribusiness and food company, from April 2009 to November 2010. From 2003 to April 2009, Mr. Diniz was Chief Financial Officer and a member of the board of directors of Cosan S.A., a renewable energy company. He received a Master of Business Administration degree from IMD in Switzerland, a Bachelor of Science degree in Production Engineering from the University of São Paulo (USP) in Brazil, and did post graduate work in human resources at INSEAD in France.

Zanna McFerson

Zanna McFerson joined us as our Chief Business Officer in March 2013. Prior to joining Amyris, Ms. McFerson was a Vice President at Cargill, Incorporated, a privately-held international producer and marketer of food, agricultural, financial and industrial products and services, where she served as Business Director, Truvia Enterprise, from August 2008 to February 2013. Previously, Ms. McFerson served as Business Director, Health and Nutrition - Truvia, at Cargill from May 2006 to July 2008. She joined Cargill in 1990 as a commodity trader and held various roles in sales, management, and new product development until joining the leadership team of Cargill Health and Nutrition in May 2005. Ms. McFerson received a Bachelor of Arts degree in Economics from the University of Illinois and a Master of Business Administration degree from the University of Iowa. She served on the Board of Directors for the International Stevia Council, and serves on the Board of Directors of the Real Stevia Company in Stockholm, Sweden.

Nicholas Khadder

Nicholas Khadder has served as our General Counsel and Corporate Secretary since December 2013. Previously, Mr. Khadder served as our Interim General Counsel from July 2013 to December 2013, and as our Assistant General Counsel from October 2010 to July 2013. Prior to joining Amyris, Mr. Khadder served in senior corporate counsel roles at LeapFrog Enterprises, Inc., an educational entertainment company, from August 2008 to September 2010, and at Protiviti, Inc., an internal audit and risk consulting firm, from June 2005 to July 2008. Before commencing his in-house legal career, Mr. Khadder was a corporate law associate at Fenwick & West LLP from 1998 to 2005. Mr. Khadder holds a Doctor of Jurisprudence degree from Berkeley Law (the University of California, Berkeley, School of Law), and a Bachelor's degree in English from the University of California, Berkeley.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

We lease approximately 136,000 square feet of space in two adjacent buildings in Emeryville, California, pursuant to two leases. Of this space, we use approximately 113,000 square feet for general office purposes and lab space, and approximately 23,000 square feet comprise our pilot plant. Our leases expire in May 2023 and we have an option to extend these leases for five years. We also lease approximately 19,375 square feet of space in North Carolina under a month-to-month lease. This lease relates to manufacturing operations through Glycotech, one of our variable interest entities.

Amyris Brasil leases approximately 47,000 square feet of space in Campinas, Brazil, pursuant to two leases that will expire in October 2015 and November 2016. Of this space, approximately 36,000 square feet comprise a pilot plant and demonstration facility, and the remainder is general office and lab space. Amyris Brasil has a right of first refusal to purchase the space if the landlord elects to sell it and an option to extend the lease for five additional years.

Our first large-scale Biofene production plant commenced operations in December 2012 in Brotas in the state of São Paulo, Brazil and is adjacent to an existing sugar and ethanol mill, Paraíso Bioenergia. Amyris Brasil leases approximately 800,000 square feet of space for this plant, which has six 200,000 liter production fermenters and was designed to process sugarcane juice, or its equivalent, from up to one million tons of raw sugarcane annually; this lease expires in March 2026. Amyris Brasil also leases approximately 500,000 square feet of space for a future manufacturing site; this lease expires in January 2031.

We have also secured the use of a Biofene storage tank with an aggregate capacity of 3,000 barrels or 94,500 gallons in Philadelphia. This facility provides temporary storage of our renewable farnesene prior to further processing into one of our finished products. Our current agreement expires in June 2015.

We believe that our current facilities are suitable and adequate to meet our needs and that suitable additional space will be available to accommodate the foreseeable expansion of our operations.

ITEM 3. LEGAL PROCEEDINGS

In May 2013, a securities class action complaint was filed against Amyris and our CEO, John G. Melo, in the U.S. District Court for the Northern District of California. In October 2013, the lead plaintiffs filed a consolidated amended complaint. The complaint, as amended, sought unspecified damages on behalf of a purported class that would comprise all individuals who acquired our common stock between April 29, 2011 and February 8, 2012. The complaint alleged securities law violations based on the company's commercial projections during that period. In December 2013, we filed a motion to dismiss the complaint. In March 2014, the court issued an order granting our motion to dismiss with leave to amend the complaint. We continue to believe the complaint lacks merit, and intend to defend ourselves vigorously.

In August 2013, a complaint entitled Steve Shannon, derivatively on behalf of Amyris, Inc. v. John G. Melo et al and Amyris, Inc., was filed against Amyris as nominal defendant in the United States District Court for the Northern District of California. The lawsuit seeks unspecified damages on behalf of Amyris from certain of our current and former officers, directors and employees and alleges these defendants breached their fiduciary duties to Amyris and unjustly enriched themselves by making allegedly false and misleading statements and omitting certain material facts in our securities filings. Because this purported stockholder derivative action is based on substantially the same facts as the securities class action described above, the two actions have been related and will be heard by the same judge. By stipulation of the parties, the case has been stayed until the Company either files an answer in the securities class action or the securities action is dismissed with prejudice. We do not believe the claims in the complaint have merit, and intend to defend ourselves vigorously.

We may be involved, from time to time, in legal proceedings and claims arising in the ordinary course of our business. Such matters are subject to many uncertainties and there can be no assurance that legal proceedings arising in the ordinary course of business or otherwise will not have a material adverse effect on our business, results of operations, financial position or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information for Common Stock

Our common stock commenced trading on the NASDAQ Global Market on September 28, 2010 under the symbol "AMRS" and currently trades on the NASDAQ Global Select Market under the same symbol. The following table sets forth the high and low per share sale prices of our common stock as reported on the NASDAQ Global Select Market during each of the previous eight quarters.

	Price Range Per Share	
	High	Low
Fiscal 2013		
Fourth quarter	$ 6.11	$ 2.17
Third quarter	$ 3.03	$ 2.22
Second quarter	$ 3.20	$ 2.60
First quarter	$ 4.15	$ 2.56
Fiscal 2012		
Fourth quarter	$ 3.48	$ 2.16
Third quarter	$ 4.56	$ 2.74
Second quarter	$ 5.16	$ 1.57
First quarter	$ 12.29	$ 4.45

Holders

As of February 27, 2014, there were approximately 104 holders of record (not including beneficial holders of stock held in street names) of our common stock.

Dividend Policy

We have never declared or paid cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to declare or pay any dividends in the foreseeable future. Any further determination to pay dividends on our capital stock will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements and other factors that our Board of Directors considers relevant.

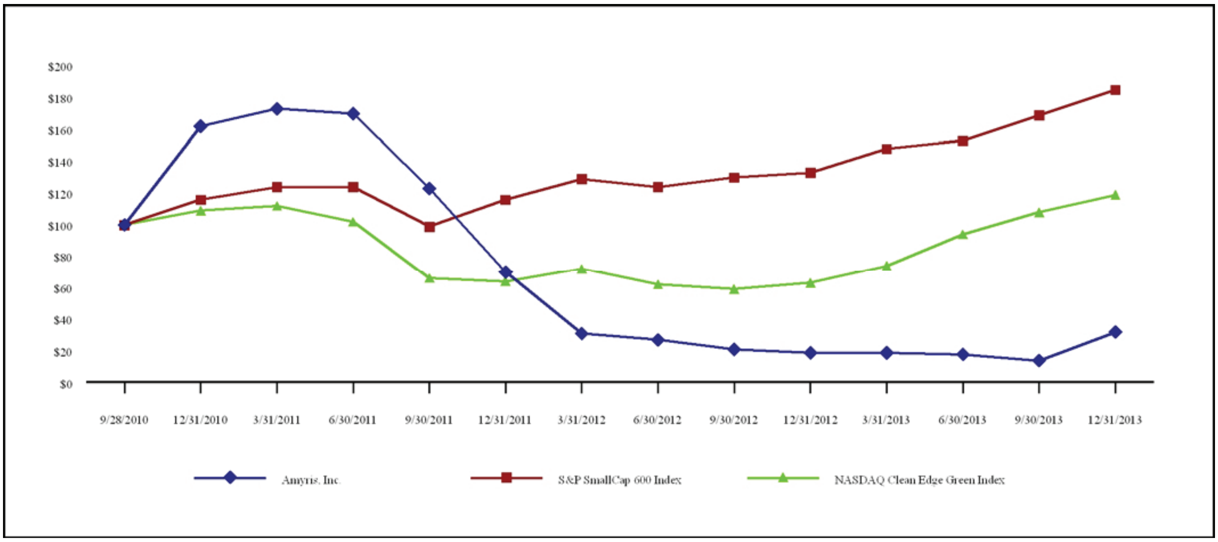
Securities Authorized for Issuance Under Equity Compensation Plans

See Item 12 of Part III of this Report regarding information about securities authorized for issuance under our equity compensation plans.

Performance Graph[1]

The following graph shows a comparison from September 28, 2010 through December 31, 2013 of cumulative total return on an assumed investment of $100.00 in cash in our common stock, the S&P SmallCap 600 Index and the NASDAQ Clean Edge Green Energy Index. Such returns are based on historical results and are not intended to suggest future performance. Data for the S&P SmallCap 600 Index and the NASDAQ Clean Edge Green Energy Index assume reinvestment of dividends.

COMPARISON OF 39 MONTH CUMULATIVE TOTAL RETURN
Among Amyris, Inc., the S&P SmallCap 600 Index, and the NASDAQ Clean Edge Green Energy Index



	9/28/2010	12/31/2010	3/31/2011	6/30/2011	9/30/2011	12/31/2011	3/31/2012	6/30/2012	9/30/2012	12/31/2012	3/31/2013	6/31/2013	9/30/2013	12/31/2013
Amyris, Inc.	$ 100	$ 162	$ 173	$ 170	$ 123	$ 70	$ 31	$ 27	$ 21	$ 19	$ 19	$ 18	$ 14	$ 32
S&P SmallCap 600 Index	$ 100	$ 116	$ 124	$ 124	$ 99	$ 116	$ 129	$ 124	$ 130	$ 133	$ 148	$ 153	$ 169	$ 185
NASDAQ Clean Edge Green Energy Index	$ 100	$ 109	$ 112	$ 102	$ 66	$ 64	$ 72	$ 62	$ 59	$ 63	$ 74	$ 94	$ 108	$ 119

(1) *This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section, and shall not be deemed incorporated by reference into any filing of Amyris, Inc. under the Securities Act of 1933, as amended.*

Recent Sales of Unregistered Securities

Private Placements

On December 24, 2012, we sold 14,177,849 shares common stock at a price of $2.98 per share for aggregate cash proceeds of $37.2 million and cancellation of $5.0 million of an outstanding senior unsecured convertible promissory notes we previously issued to Total. The cash settlement with respect to 5,033,557 of such shares occurred on January 14, 2013.

On March 27, 2013, we sold 1,533,742 shares of common stock at a price of $3.26 per share for an aggregate cash proceeds of $5.0 million.

Promissory Notes

On June 6, 2013 and July 26, 2013, we sold $10.0 million and $20.0 million of 1.5% Senior Unsecured Convertible Notes Due 2017 for aggregate offering prices of $10.0 million and $20.0 million in cash, respectively. These notes have a March 1, 2017 maturity date and a conversion price equal to $3.08 per share of our common stock. The conversion price of these notes is subject to adjustment for proportional adjustments to outstanding common stock and under anti-dilution provisions in case of certain dividends and distributions. The holder of these notes (Total) has a right to require repayment of 101% of the principal amount of the notes in the event of a change of control in Amyris, and the notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment.

On October 4, 2013, we sold a Senior Promissory Note to Temasek for a bridge loan of $35.0 million. The note was not convertible or exercisable for equity securities; however it was cancelled in exchange for a Tranche I Senior Convertible Note as described below.

On October 16, 2013, we sold approximately $51.9 million of Tranche I Senior Convertible Notes in the August Financing for an aggregate offering price of $51.9 million, including cancellation of the Temasek Bridge Note ($35.0 million), new cash proceeds of approximately $7.6 million, and cancellation by Total of previously outstanding convertible promissory notes (approximately $9.3 million). These notes are due sixty months from the date of issuance and are convertible into shares of our common stock at a conversion price equal to $2.44 per share, subject to adjustment as described below. Specifically, the notes are convertible at the option of the holder (i) at any time after 18 months from the date of the purchase agreement relating to such notes, (ii) on a change of control, and (iii) upon the occurrence of an event of default. The conversion price of the notes was subject to reduction to $2.15 if either (a) a specified company manufacturing plant fails to achieve a total production of 1,000,000 liters within a run period of 45 days prior to June 30, 2014, or we fail to achieve gross margins from product sales of at least 5% prior to June 30, 2014, or (b) we reduce the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of these new notes; provided, however, that, if both of the conditions described in clauses (a) and (b) were to occur, the conversion price of the notes could be reduced to $1.87. In addition to the conversion price adjustments set forth above, the conversion price of these notes is subject to further adjustment (i) according to proportional adjustments to outstanding common stock in case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to such notes held by any purchaser other than Total, in the event that Total exchanges existing convertible notes for new securities of the company in connection with future financing transactions in excess of its pro rata amount. The purchasers have a right to require repayment of 101% of the principal amount of the notes in the event of a change of control and the notes provide for payment of unpaid interest on conversion following such a change of control if the purchasers do not require such repayment.

On December 2, 2013, we issued approximately $69.0 million of 1.5% Senior Secured Convertible Notes to Total, replacing an equal amount of previously outstanding 1.5% Senior Unsecured Convertible Notes Due 2017 held by Total. The exchange was completed as part of the establishment of a joint venture, and the conversion terms of the new notes were generally identical to the terms of the notes that were cancelled, except that the new notes are secured by certain of our shares in the joint venture.

On December 24, 2013, we agreed to sell approximately $34.0 million of Tranche II Senior Convertible Notes in the August Financing for an aggregate offering price of $34.0 million, including new cash proceeds of approximately $28.0 million, and cancellation by Total of previously outstanding convertible promissory notes (approximately $6.0 million). We sold and issued these notes in January 15, 2014. The notes are due sixty months from the date of issuance and are convertible into shares of our common stock at a conversion price equal to $2.87 per share, subject to adjustment as described below. Specifically, the notes are convertible at the option of the holder (i) at any time 12 months after issuance, (ii) on a change of control, and (iii) upon the occurrence of an event of default. The conversion price of these notes is subject to adjustment (i) according to proportional adjustments to outstanding common stock in case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to such notes held by any purchaser other than Total, in the event that Total exchanges existing convertible notes for new securities of the company in connection with future financing transactions in excess of its pro rata amount. The purchasers have a right to require repayment of 101% of the principal amount of the Tranche II Notes in the event of a change of control and the notes provide for payment of unpaid interest on conversion following such a change of control if the purchasers do not require such repayment.

With the exception of a placement agent used in connection with the sale of securities to one of the purchasers in the convertible note financing we closed in January 2014, no underwriters were involved in the foregoing sales of securities. These securities were issued in private transactions pursuant to Section 4(2) of the Securities Act. The recipients of these securities acquired the securities for investment purposes only and without intent to resell, were able to fend for themselves in these transactions, and were accredited investors as defined in Rule 501 of Regulation D promulgated under Section 3(b) of the Securities Act, and appropriate restrictions were set out in the agreements for, and stock certificates and notes issued in, these transactions. These security holders had adequate access, through their relationships with us, to information about us.

ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated statements of operations data for the years ended December 31, 2013, 2012, 2011, 2010 and 2009 and the selected consolidated balance sheets data as of December 31, 2013, 2012, 2011, 2010 and 2009 are derived from our audited Consolidated Financial Statements, appearing elsewhere in this report. The historical results presented below are not necessarily indicative of financial results to be achieved in future periods. You should read the following selected financial data in conjunction with "Management's Discussion Analysis of Financial Condition and Results of Operations" and our Consolidated Financial Statements and related Notes included in Item 8 of this report.

	Years Ended December 31,				
	2013	2012	2011	2010	2009
	(In Thousands, Except Share and Per Share Amounts)				
Consolidated Statements of Operations Data:					
Revenues					
Renewable product sales	$ 14,428	$ 10,802	$ 763	$ —	$ —
Related party renewable product sales	1,380	—	—	—	—
Ethanol and ethanol-blended gasoline	—	38,836	129,074	68,664	61,689
Total product sales	15,808	49,638	129,837	68,664	61,689
Grants and collaborations revenue	22,664	14,281	17,154	11,647	2,919
Related party grants and collaborations revenue	2,647	9,775	—	—	—
Grants and collaborations revenue	25,311	24,056	17,154	11,647	2,919
Total revenues	41,119	73,694	146,991	80,311	64,608
Cost and operating expenses					
Cost of products sold	38,253	77,314	155,615	70,515	60,428
Loss on purchase commitments and write off of production assets	9,366	45,854	—	—	—
Research and development	56,065	73,630	87,317	55,249	38,263
Sales, general and administrative	57,051	78,718	83,231	40,393	23,558
Restructuring and asset impairment (income) charges	—	—	—	(2,061)	5,768
Total cost and operating expenses	160,735	275,516	326,163	164,096	128,017
Net loss from operations	(119,616)	(201,822)	(179,172)	(83,785)	(63,409)
Other income (expense):					
Interest income	162	1,472	1,542	1,540	448
Interest expense	(9,107)	(4,926)	(1,543)	(1,443)	(1,218)
Income (loss) from change in fair value of derivative instruments	(84,726)	1,790	—	—	—
Income (loss) from extinguishment of debt	(19,914)	(920)	—	—	—
Other income (expense), net	(2,553)	(646)	214	898	(621)
Total other income (expense)	(116,138)	(3,230)	213	995	(1,391)
Loss before income taxes	(235,754)	(205,052)	(178,959)	(82,790)	(64,800)
Income tax benefit (provision)	847	(981)	(552)	—	—
Net loss	$ (234,907)	$ (206,033)	$ (179,511)	$ (82,790)	$ (64,800)
Net (income) loss attributable to noncontrolling interest	(204)	894	641	920	341
Net loss attributable to Amyris, Inc.	$ (235,111)	$ (205,139)	$ (178,870)	$ (81,870)	$ (64,459)
Deemed dividend related to a beneficial conversion feature	—	—	—	(42,009)	—
Net loss attributable to Amyris, Inc. common stockholders	$ (235,111)	$ (205,139)	$ (178,870)	$ (123,879)	$ (64,459)
Net loss per share attributable to common stockholders, basic and diluted	$ (3.12)	$ (3.62)	$ (3.99)	$ (8.35)	$ (13.56)
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic and diluted	75,472,770	56,717,869	44,799,056	14,840,253	4,753,085

	As of December 31,				
	2013	2012	2011	2010	2009
	(In Thousands)				
Consolidated Balance Sheets Data:					
Cash, cash equivalents, investments and restricted cash	$ 9,944	$ 31,644	$103,592	$257,933	$ 71,716
Working capital	(382)	3,668	47,205	242,818	51,062
Property, plant and equipment, net	140,591	163,121	128,101	54,847	42,560
Total assets	198,864	242,834	320,111	357,453	122,159
Total indebtedness(1)	153,305	106,774	47,660	12,590	20,608
Convertible preferred stock warrant liability	—	—	—	—	2,740
Convertible preferred stock	—	—	—	—	179,651
Redeemable noncontrolling interest	—	—	—	—	5,506
Total equity (deficit)	(135,848)	66,229	160,812	307,548	(113,745)

(1) Total indebtedness as of December 31, 2013, 2012, 2011, 2010 and 2009 includes $1.2 million, $2.6 million, $6.3 million, $5.9 million and $7.2 million, respectively, in capital lease obligations, zero, $1.6 million, $3.1 million, $5.7 million and $4.0 million, respectively, in notes payable, $25.3 million, $26.2 million, $19.4 million, $1.0 million and $1.0 million, respectively, in loans payable, $8.8 million, $12.4 million, $18.9 million, zero and $8.3 million respectively, in credit facilities. Total indebtedness as of December 31, 2013 and 2012 also included $28.5 million and $25.0 million, respectively, in convertible notes and $89.5 million and $39.0 million, respectively in related party convertible notes. There was no convertible notes balance outstanding as of December 31, 2011, 2010 and 2009 (see Note 5, "Debt" and Note 6, "Commitments and Contingencies" to our Consolidated Financial Statements).

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

Amyris is a renewable products company focused on providing sustainable alternatives to a broad range of petroleum-sourced products. We developed innovative microbial engineering and screening technologies that modify the way microorganisms process sugars. We are using our proprietary synthetic biology platform to design microbes, primarily yeast, and use them as living factories in established fermentation processes to convert plant-sourced sugars into renewable hydrocarbons. We are developing, and, in some cases, already commercializing, products from these hydrocarbons in several target industry sectors, including cosmetics, lubricants, flavors and fragrances, performance materials, and transportation fuels. We call these No Compromise products because we design them to perform comparably to or better than currently available products.

We have been applying our industrial synthetic biology platform to provide alternatives to a broad range of petroleum-sourced products. We have focused our development efforts on the production of Biofene, our brand of renewable farnesene, a long-chain, branched liquid hydrocarbon molecule. Using Biofene as a first commercial building block molecule, we are developing a wide range of renewable products for our target markets.

While our platform is able to utilize a wide variety of feedstocks, we are focusing our large-scale production plans primarily on the use of Brazilian sugarcane as our feedstock because of its abundance, low cost and relative price stability. We have also been able to produce Biofene through the use of other feedstocks such as sugar beets, corn dextrose, sweet sorghum and cellulosic sugars.

Our first purpose-built, large-scale Biofene production plant commenced operations in southeastern Brazil in December 2012. This plant is located in Brotas, in the state of São Paulo, Brazil, and is adjacent to an existing sugar and ethanol mill, Paraíso Bioenergia. We have also advanced initial construction of a second large-scale production plant in Brazil, located at the SMSA sugar and ethanol mill also in the state of São Paulo, Brazil, for which we intend to complete the construction when market developments support the start-up of that plant.

Our business strategy is focused on our commercialization efforts of specialty products while moving commodity products, including our fuels and base oil lubricants products, into joint venture arrangements with established industry leaders. We believe this approach will permit access to the capital and resources necessary to support large-scale production and global distribution for our products. Our initial renewable products efforts have been focused on cosmetics, niche fuel opportunities, fragrance oils, and performance materials sector.

Total Relationship

In July 2012 and December 2013, we entered into a series of agreements to establish a research and development program and form a joint venture with Total to produce and commercialize Biofene-based diesel and jet fuels, and successfully formed such joint venture in December 2013. With an exception for our fuels business in Brazil, the collaboration and joint venture established the exclusive means for us to develop, produce and commercialize fuels from Biofene. We granted the joint venture exclusive licenses under certain of our intellectual property to make and sell joint venture products. We also granted the joint venture, in the event of a buy-out of our interest in the joint venture by Total (which Total is entitled to do under certain circumstances described below) a non-exclusive license to optimize or engineer yeast strains used by us to produce farnesene for the joint venture's diesel and jet fuels. As a result of these licenses, Amyris generally no longer has an independent right to make or sell Biofene fuels outside of Brazil.

Our agreements with Total relating to our fuels collaboration created a convertible debt financing structure for funding the research and development program. The collaboration agreements contemplated approximately $105.0 million in financing for the collaboration, of which Total has funded $83.3 million to date. Total is to fund up to the remaining $21.7 million, with $10.85 million to be paid by July 2014 and $10.85 million to be paid by January 2015. If Total chooses not to continue participating at certain "Go/No-Go" decision points during the program, licenses to our technology would terminate, and the notes would remain outstanding and become payable at maturity unless otherwise converted in accordance with their terms. If Total chooses to continue the collaboration and makes a final decision to proceed with the joint venture only for jet fuel, Total is required to buy from Amyris 50% of the preferred shares of the joint venture in exchanges for the settlement of 30% of the principal and interest outstanding under the notes. The remaining notes would continue to be outstanding and payable upon maturity unless otherwise converted in accordance with the terms of the notes.

Sales and Revenue

To commercialize our initial Biofene-derived product, squalane, in the cosmetics sector for use as an emollient, we have entered into marketing and distribution agreements in Europe, Asia, and North America. As an initial step towards commercialization of Biofene-based diesel, we have entered into agreements with municipal fleet operators in Brazil. Our diesel fuel is supplied to the largest Company in Brazil's fuel distribution segment which blends our product with petroleum diesel, and sells to a number of bus fleet operators. For the industrial lubricants market, we established a joint venture with Cosan for the worldwide development, production and commercialization of renewable base oils in the lubricant sector.

Financing

In 2013, we completed multiple financings involving loans, convertible debt and equity offerings. We completed private placements of 6,567,299 shares of common stock in 2013 for aggregate proceeds of $20.0 million, of which $15.0 million was from the receipt of funds from a private placement that closed in December 2012. We raised $72.6 million in 2013 from an offering of senior unsecured convertible promissory notes pursuant to the August Financing and research and development funding from Total.

In December 2012, we completed a private placement of 14,177,849 shares of common stock for aggregate proceeds of $37.2 million and the cancellation of $5.0 million worth of outstanding senior unsecured convertible promissory notes we previously issued to Total in exchange for approximately 1,677,852 shares of common stock. Under the December 2012 purchase agreement and related documents, the purchase of a portion of the shares, representing $15.0 million of the proceeds from that transaction, was settled in January 2013. Cash received as of December 31, 2012 in the December 2012 financing, net of the note conversion and the January 2013 settlement, was $22.2 million. In January 2013, we received the $15.0 million proceeds from the private placement offering that closed in December 2012. Consequently we issued 5,033,557 shares of the 14,177,849 shares of Amyris' common stock issuable pursuant to such private placement.

In March 2013, we completed a private placement of 1,533,742 of our common stock to Biolding for aggregate proceeds of $5.0 million. This private placement represented the final tranche of Biolding's preexisting contractual obligation to fund $15.0 million upon satisfaction by us of certain criteria associated with the commissioning of our production plant in Brotas, Brazil.

In March 2013, we entered into a letter agreement with Total (referred to as the March 2013 Letter Agreement). Under the March 2013 Letter Agreement, we sold and issued a $10.0 million senior unsecured convertible note to Total with an initial conversion price of $3.08 per share in June 2013. Subsequently, in July 2013, we sold and issued a $20.0 million senior unsecured convertible note to Total with the same initial conversion price of $3.08 per share as the note sold in June 2013. The July 2013 purchase and sale completed Total's commitment to purchase $30.0 million of such notes by July 2013.

In October 2013, we completed an additional private placement of convertible promissory notes in the August 2013 Financing as described in more detail below under "Liquidity and Capital Resources."

In December 2013, we agreed to complete an additional private placement of a portion of the second tranche of convertible promissory notes in the August 2013 Financing as described in more detail below under "Liquidity and Capital Resources." On January 15, 2014, the Company completed the offering of convertible promissory notes in the second tranche of the August 2013 Financing.

Liquidity

We have incurred significant losses since our inception and believe that we will continue to incur losses and negative cash flow from operations into at least 2014. As of December 31, 2013, we had an accumulated deficit of $821.4 million and had cash, cash equivalents and short term investments of $8.3 million. We have significant outstanding debt and contractual obligations related to purchase commitments, as well as capital and operating leases. As of December 31, 2013, our debt, net of discount totaled $152.1 million, of which $6.4 million matures within the next twelve months. Additionally, our debt agreements contain various covenants, including restrictions on business that could cause us to be at risk of defaults.

In addition to cash contributions from product sales and debt and equity financings, we also depend on collaboration funding to support our operating expenses. While part of this funding is committed based on existing collaboration agreements, we will need to identify and obtain funding under additional collaborations that are not yet subject to any definitive agreement or are not yet identified. In addition, some of our existing anticipated collaboration funding is subject to our achievement of milestones or other funding conditions. If we are unable to raise additional financing, or if other expected sources of funding are delayed or not received, we would take actions to support our liquidity needs that could have a material negative impact on our ability to continue our business as currently contemplated. See "Liquidity and Capital Resources" below in this section for additional detail regarding these contingency plans and their potential effects on our business.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. We base our estimates and assumptions on historical experience and on various other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. The results of our analysis form the basis for making assumptions about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies involve significant areas of management's judgments and estimates in the preparation of our financial statements.

Revenue Recognition

We recognize revenue from the sale of farnesene-derived products, from the delivery of collaborative research services and from government grants. Through the third quarter of 2012, we sold ethanol and reformulated ethanol-blended gasoline under short-term agreements at prevailing market prices. As of September 30, 2012 we had transitioned out of that business. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the fee is fixed or determinable and collectability is reasonably assured.

If sales arrangements contain multiple elements, we evaluate whether the components of each arrangement represent separate units of accounting. Application of revenue recognition standards requires subjective determination and requires management to make judgments about the fair values of each individual element and whether it is separable from other aspects of the contractual relationship.

For each source of revenues, we apply the above revenue recognition criteria in the following manner:

Product Sales

Starting in the second quarter of 2011, we commenced sales of farnesene-derived products. Revenues are recognized, net of discounts and allowances, once passage of title and risk of loss have occurred, provided all other revenue recognition criteria have also been met.

Shipping and handling costs charged to customers are recorded as revenues. Shipping costs are included in cost of products sold. Such charges were not significant in any of the periods presented.

Grants and Collaborative Research Services

Revenues from collaborative research services are recognized as the services are performed consistent with the performance requirements of the contract. In cases where the planned levels of research services fluctuate over the research term, we recognize revenues using the proportionate performance method based upon actual efforts to date relative to the amount of expected effort to be incurred by us. When up-front payments are received and the planned levels of research services do not fluctuate over the research term, revenues are recorded on a ratable basis over the arrangement term, up to the amount of cash received. When up-front payments are received and the planned levels of research services fluctuate over the research term, revenues are recorded using the proportionate performance method, up to the amount of cash received. Where arrangements include milestones that are determined to be substantive and at risk at the inception of the arrangement, revenues are recognized upon achievement of the milestone and is limited to those amounts whereby collectibility is reasonably assured.

Government grants are made pursuant to agreements that generally provide cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and only perfunctory obligations are outstanding. Under a government contract signed in June 2012, we will receive funding based on achievement of program milestones and accordingly revenues are recognized using the proportionate performance method based upon actual efforts to date relative to the amount of expected effort to be incurred, up to the amount of verified payable milestones.

Consolidations

We have interests in certain joint venture entities that are variable interest entities or VIEs. Determining whether to consolidate a variable interest entity may require judgment in assessing (i) whether an entity is a variable interest entity and (ii) if we are the entity's primary beneficiary and thus required to consolidate the entity. To determine if we are the primary beneficiary of a VIE, we evaluate whether we have (i) the power to direct the activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE.

Our evaluation includes identification of significant activities and an assessment of our ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding and financing and other applicable agreements and circumstances. Our assessment of whether we are the primary beneficiary of our VIEs requires significant assumptions and judgment.

Impairment of Long-Lived Assets

We assess impairment of long-lived assets, which include property, plant and equipment and test long-lived assets for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances which could trigger a review include, but are not limited to, significant decreases in the market price of the asset; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; or expectations that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.

Recoverability is assessed based on the fair value of the asset, which is calculated as the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. An impairment loss is recognized in the consolidated statements of operations when the carrying amount is determined not to be recoverable and exceeds fair value, which is determined on a discounted cash flow basis.

As a result of our impairment assessment of long-lived assets, we recorded losses on write-off of production assets of $7.7 million and $6.4 million during the year ended December 31, 2013 and 2012, respectively. There were no such losses on write off of production assets recorded in the year ended December 31, 2011.

We make estimates and judgments about future undiscounted cash flows and fair values. Although our cash flow forecasts are based on assumptions that are consistent with our plans, there is significant exercise of judgment involved in determining the cash flow attributable to a long-lived asset over its estimated remaining useful life. Significant changes in our plans in using long-lived assets, such as delays in the re-start of construction and completion of our large-scale SMA production facility, could significantly reduce our estimates of anticipated cash flows in the future. As a result, the carrying amounts of our long-lived assets could be reduced through impairment charges.

Inventories

Inventories, which consist of farnesene and farnesene-derived products are stated at the lower of cost or market. We evaluate the recoverability of our inventories based on assumptions about expected demand and net realizable value. If we determine that the cost of inventory exceeds its estimated net realizable value, we record a write-down equal to the difference between the cost of inventory and the estimated net realizable value. If actual net realizable values are lower than those projected by management, additional inventory write-downs may be required that could negatively impact our operating results. If actual net realizable values are more than those projected by management, we may have favorable operating results when products that have been previously written down are sold in the normal course of business. We also evaluate the terms of our agreements with our suppliers and establish accruals for estimated losses on adverse purchase commitments as necessary, applying the same lower of cost or market approach that is used to value inventory.

Goodwill and Intangible Assets

Goodwill represents the excess of the cost over the fair value of net assets acquired from our business combinations. Intangible assets are comprised primarily of in-process research and development (or IPR&D). We make significant judgments in relation to the valuation of goodwill and intangible assets resulting from business combinations and asset acquisitions.

There are several methods that can be used to determine the estimated fair value of the IPR&D acquired in a business combination. We have used the "income method," which applies a probability weighting that considers the risk of development and commercialization, to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, pricing of similar products, and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written off, as appropriate.

Goodwill and intangible assets with indefinite lives are assessed for impairment using fair value measurement techniques on an annual basis or more frequently if facts and circumstance warrant such a review. When required, a comparison of fair value to the carrying amount of assets is performed to determine the amount of any impairment.

We evaluate our intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased licenses and permits and are amortized on a straight-line basis over their estimated useful lives. Factors that could trigger an impairment review include significant under-performance relative to historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, we will reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on our reported financial results. As a result of our impairment assessment of goodwill and intangible assets, we have not recognized any impairment charges through December 31, 2013.

Stock-Based Compensation

Stock-based compensation cost for restricted stock units (or RSUs) is measured based on the closing fair market value of our common stock on the date of grant. Stock-based compensation cost for stock options and employee stock purchase plan rights is estimated at the grant date and offering date, respectively, based on the fair-value of our common stock using the Black-Scholes option pricing model. We amortize the fair value of the employee stock options on a straight-line basis over the requisite service period of the award, which is generally the vesting period. The measurement of nonemployee stock-based compensation is subject to periodic adjustments as the underlying equity instruments vest, and the resulting change in value, if any, is recognized in our consolidated statements of operations during the period the related services are rendered. There is inherent uncertainty in these estimates and if different assumptions had been used, the fair value of the equity instruments issued to nonemployee consultants could have been significantly different.

In future periods, our stock-based compensation expense is expected to change as a result of our existing unrecognized stock-based compensation still to be recognized and as we issue additional stock-based awards in order to attract and retain employees and nonemployee consultants.

Significant Factors, Assumptions and Methodologies Used In Determining Fair Value

We utilize the Black-Scholes option pricing model to estimate the fair value of our equity awards. The Black-Scholes option pricing model requires inputs such as the expected term of the grant, expected volatility and risk-free interest rate. Further, the forfeiture rate also affects the amount of aggregate compensation that we are required to record as an expense. These inputs are subjective and generally require significant judgment.

The fair value of employee stock options was estimated using the following weighted-average assumptions:

	Years Ended December 31,		
	2013	2012	2011
Expected dividend yield	—%	—%	—%
Risk-free interest rate	1.4%	1.1%	2.3%
Expected term (in years)	6.1	6.0	5.8
Expected volatility	82%	77%	86%

Expected term is derived from a comparable group of publicly listed companies that have a similar industry, life cycle, revenue, and market capitalization and the historical data on employee exercises.

Expected volatility is derived from a combination of historical volatility for our stock and the historical volatilities of a comparable group of publicly listed companies within our industry over a period equal to the expected term of our options because we do not yet have a long trading history.

Risk-free interest rate is the market yield currently available on United States Treasury securities with maturities approximately equal to the option's expected term.

Expected dividend yield was assumed to be zero as we have not paid, and do not anticipate, declaring any cash dividends to holders of our common stock in the foreseeable future.

We estimate our forfeiture rate based on an analysis of our actual forfeitures and will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover and other factors. Quarterly changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the consolidated financial statements.

We will continue to use judgment in evaluating the expected term, volatility and forfeiture rate related to our own stock-based compensation on a prospective basis and incorporating these factors into the Black-Scholes option pricing model.

Each of these inputs is subjective and generally requires significant management judgment to determine. If, in the future, we determine that another method for calculating the fair value of our stock options is more reasonable, or if another method for calculating these input assumptions is prescribed by authoritative guidance, and, therefore, should be used to estimate expected volatility or expected term, the fair value calculated for our employee stock options could change significantly. Higher volatility and longer expected terms generally result in an increase to stock-based compensation expense determined at the date of grant.

Income Taxes

We are subject to income taxes in both the United States and foreign jurisdictions, and we use estimates in determining our provisions for income taxes. We use the liability method of accounting for income taxes, whereby deferred tax assets or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect for the year in which the differences are expected to affect taxable income.

Recognition of deferred tax assets is appropriate when realization of such assets is more likely than not. We recognize a valuation allowance against our net deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be fully realizable. This assessment requires judgment as to the likelihood and amounts of future taxable income by tax jurisdiction. At December 31, 2013, we had a full valuation allowance against all of our deferred tax assets.

We apply the provisions of Financial Accounting Standards Board (or FASB) guidance on accounting for uncertainty in income taxes. We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and the tax benefit to be recognized is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

Embedded Derivatives Related to Convertible Notes

Embedded derivatives that are required to be bifurcated from the underlying debt instrument (i.e. host) are accounted for and valued as a separate financial instrument. We evaluated the terms and features of our convertible notes payable and identified compound embedded derivatives (conversion options that contain "make-whole interest" provisions or down round conversion price adjustment provisions) requiring bifurcation and accounting at fair value because the economic and contractual characteristics of the embedded derivatives met the criteria for bifurcation and separate accounting due to the conversion option containing a "make-whole interest" provision, that requires cash payment for forgone interest upon a change of control and down round conversion price adjustment provisions.

We estimate the fair value of the compound embedded derivatives for the Total Notes using a Monte Carlo simulation valuation model that combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of our common stock into which the notes are convertible.

We estimate the fair value of the compound embedded derivative for the Tranche I Notes using a binomial lattice model in order to estimate the fair value of the embedded derivative in the Tranche I convertible notes. A binomial lattice model generates two probable outcomes — one up and another down — arising at each point in time, starting from the date of valuation until the maturity date. A lattice model was initially used to determine if the convertible notes would be converted, called or held at each decision point. Within the lattice model, the following assumptions are made: (i) the convertible notes will be converted early if the conversion value is greater than the holding value; or (ii) the convertible notes will be called if the holding value is greater than both (a) redemption price and (b) the conversion value plus the coupon make-whole payment at the time. If the convertible notes are called, then the holder will maximize their value by finding the optimal decision between (1) redeeming at the redemption price and (2) converting the convertible notes. Using this lattice method, we fair valued the embedded derivative using the "with-and-without method", where the fair value of the convertible notes including the embedded derivative is defined as the "with", and the value of the convertible notes excluding the embedded derivative is defined as the "without". This method estimates the fair value of the embedded derivative by looking at the difference in the fair values between the convertible notes with the embedded derivative and the fair value of the convertible notes without the embedded derivative. The lattice model uses the stock price, conversion price, maturity date, risk-free interest rate, estimated stock volatility and estimated credit spread.

Changes in the inputs into these valuation models have a significant impact in the estimated fair value of the embedded derivatives. For example, a decrease (increase) in the estimated credit spread for the Company results in an increase (decrease) in the estimated value of the embedded derivatives. Conversely, a decrease (increase) in the stock price results in a decrease (increase) in the estimated fair value of the embedded derivatives. The changes in the fair value of the bifurcated compound embedded derivative is primarily related to the change in price of the underlying common stock and is reflected in our consolidated statements of operations as "Income (loss) from change in fair value of derivative instruments."

Results of Operations

Comparison of Year Ended December 31, 2013 to Year Ended December 31, 2012

Revenues

	Years Ended December 31, 2013	Years Ended December 31, 2012	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Revenues				
Renewable product sales	$ 14,428	$ 10,802	$ 3,626	34%
Related party renewable product sales	1,380	—	1,380	nm
Ethanol and ethanol-blended gasoline	—	38,836	(38,836)	(100)%
Total product sales	$ 15,808	$ 49,638	$ (33,830)	(68)%
Grants and collaborations revenue	22,664	14,281	8,383	59%
Related party grants and collaborations revenue	2,647	9,775	(7,128)	(73)%
Total grants and collaborations revenue	25,311	24,056	1,255	5%
Total revenues	$ 41,119	$ 73,694	$ (32,575)	(44)%

nm = not meaningful

Our total revenues decreased by $32.6 million to $41.1 million in 2013 as compared to the prior year primarily due to decreased revenues from product sales. Product sales decreased by $33.8 million to $15.8 million with reductions resulting primarily from the transition out of the ethanol and ethanol-blended gasoline business during the third quarter of 2012. Renewable product sales of our farnesene-derived products increased $5.0 million in 2013 compared to the prior year primarily as a result of sales to new distributors, along with related party sales of renewable product to Novvi and Total. Grants and collaborations revenue increased in 2013 by $1.3 million to $25.3 million compared to the prior year primarily due to the increase in grants and collaborations revenue of $12.0 million, from the increase of collaborations revenue from our flavors and fragrances collaborations of $9.4 million and related party collaboration revenue from Novvi of $2.6 million, offset by the decrease in collaboration revenue from Total of $9.8 million and Cosan of $0.9 million.

Cost and Operating Expenses

	Years Ended December 31, 2013	Years Ended December 31, 2012	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Cost of products sold	$ 38,253	$ 77,314	$ (39,061)	(51)%
Loss on purchase commitments and write-off of production assets	9,366	45,854	(36,488)	(80)%
Research and development	56,065	73,630	(17,565)	(24)%
Sales, general and administrative	57,051	78,718	(21,667)	(28)%
Total cost and operating expenses	$ 160,735	$ 275,516	$(114,781)	(42)%

Cost of Products Sold

Our cost of products sold decreased by $39.1 million to $38.3 million in 2013. Our cost of products sold includes cost of raw materials, labor and overhead, amounts paid to contract manufacturers, period costs related to inventory write-downs resulting from applying lower cost or market inventory valuations, and costs related to scale-up in production of such products. In 2012, we began operating our own large-scale Biofene production plant located at Brotas, in the state of São Paulo, Brazil. The decrease in cost of products sold was mainly due from our transitioning out of our ethanol and ethanol-blended gasoline business during the third quarter of 2012, resulting in a decrease of $38.6 million in the cost of products sold.

Cost of Products Sold Associated with Loss on Purchase Commitments and Write-Off of Production Assets

The loss on purchase commitments and write-off of production assets decreased by $36.5 million to $9.4 million in 2013 compared to the prior year. The decrease was mainly due to the shift of a portion of our production capacity from contract manufacturing facilities to Amyris-owned plants. Beginning in March 2012, we initiated to shift a portion of our production capacity from contract manufacturing facilities to Amyris-owned plants. As a result, we evaluated our contract manufacturing agreements and, in the first quarter of 2012 recorded a loss of $31.2 million related to facility modification costs and fixed purchase commitments. We also recorded an impairment charge of $5.5 million in the three months ended March 31, 2012 related to Amyris-owned equipment at contract manufacturing facilities, based on the excess of the carrying value of the assets over their fair value. We recognized additional charges of $1.4 million and $7.8 million, respectively, in the third and fourth quarters of 2012 associated with losses on fixed purchase commitments. We computed the loss on facility modification costs and fixed purchase commitments using the same approach that is used to value inventory-the lower of cost or market value. The computation of the loss on firm purchase commitments is subject to several estimates, including the ultimate selling price of any of our products manufactured at the relevant production facilities, and is therefore inherently uncertain. During 2013, we recorded a loss of $9.4 million related to the termination and settlement of our existing agreements with Tate & Lyle and Antibioticos. The loss of $8.4 million related to Tate & Lyle consisted of an impairment charge of $6.7 million relating to our equipment at Tate & Lyle and a $2.7 million write off of an unamortized portion of equipment costs funded by us for Tate & Lyle, offset by a $1.0 million reversal of our remaining accrual associated with our loss on fixed purchase commitments. The loss of $1.0 million related to Antibioticos, consisted of impairment charge relating to our equipment held at this location.

Research and Development Expenses

Our research and development expenses decreased by $17.6 million in 2013 over the prior year, primarily as a result of our overall cost reduction efforts and lower spending. The decreases were attributable to an $8.2 million reduction in personnel-related expenses and lower stock-based compensation expense due to lower headcount, a $2.8 million decrease in consulting and outsourced services, a $2.3 million reduction in production expenses associated with development projects, a $1.3 million decrease in laboratory supplies and equipment and a $3.0 million decrease in travel-related expenses and other overhead expenses. Research and development expenses included stock-based compensation expense of $4.3 million in 2013 compared to $6.5 million in 2012.

Sales, General and Administrative Expenses

Our sales, general and administrative expenses decreased by $21.7 million to $57.1 million in 2013 compared to the prior year, primarily as a result of our overall cost reduction efforts and lower spending. The decreases were attributable to a $14.5 million reduction in personnel-related expenses and lower stock-based compensation expense due to lower headcount, a $4.3 million decrease in consulting and outsourced services, a $0.9 million decrease in laboratory supplies and equipment, a $0.8 million reduction in production expenses associated with development projects and a decrease of $1.2. million in travel-related expenses and other overhead expenses. Sales, general and administrative expenses included stock-based compensation expense of $13.8 million and $21.0 million during 2013 and 2012, respectively.

Other Income (Expense)

	Years Ended December 31, 2013	Years Ended December 31, 2012	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Other income (expense):				
Interest income	$ 162	$ 1,472	$ (1,310)	(89)%
Interest expense	(9,107)	(4,926)	(4,181)	85%
Income (loss) from change in fair value of derivative instruments	(84,726)	1,790	(86,516)	nm
Income (loss) from extinguishment of debt	(19,914)	(920)	(18,994)	nm
Other expense, net	(2,553)	(646)	(1,907)	295%
Total other income (expense)	$ (116,138)	$ (3,230)	$(112,908)	nm

nm = not meaningful

Total other expense increased by approximately $112.9 million to $116.1 million in 2013 compared to the prior year. The increase in other expense of $112.9 million was primarily attributable to the increase in loss from change in fair value of derivative instruments of $86.5 million, due to a change in the fair value of the compound embedded derivative liability associated with our senior secured convertible promissory notes as a result of the changes in the inputs used in the valuation models from one reporting period to another, such as stock price and estimated stock volatility, and interest rate swap derivative liability, $19.0 million increase in loss on the extinguishment of debt related to the Temasek Bridge Loan and Total convertible notes, a $1.9 million increase in other expense, net, mainly due to an increase in realized loss on foreign currency transactions, a $1.3 million decrease in interest income due to lower cash balance compared to prior year and an increase in interest expense of $4.2 million associated with increased borrowings to fund our operations.

Comparison of Year Ended December 31, 2012 to Year Ended December 31, 2011

Revenues

	Years Ended December 31, 2012	Years Ended December 31, 2011	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Revenues				
Renewable product sales	$ 10,802	$ 763	$ 10,039	1,316%
Ethanol and ethanol-blended gasoline	38,836	129,074	(90,238)	(70)%
Total product sales	49,638	129,837	(80,199)	(62)%
Grants and collaborations revenue	14,281	17,154	(2,873)	(17)%
Related party grants and collaborations revenue	9,775	—	9,775	nm
Total grants and collaborations revenue	24,056	17,154	6,902	40%
Total revenues	$ 73,694	$ 146,991	$ (73,297)	(50)%

nm = not meaningful

Our total revenues decreased by $73.3 million to $73.7 million in 2012 with such reduction resulting primarily from decrease in product sales. Revenue from product sales decreased by $80.2 million to $49.6 million primarily from lower sales of ethanol and reformulated ethanol-blended gasoline purchased from third parties which accounted for $90.2 million of the reduction, with a decrease in gallons sold and an increase in average selling price per gallon compared to 2011. We sold 2.3 million gallons of ethanol and 11.2 million gallons of reformulated ethanol-blended gasoline in the 2012 compared to 10.1 million gallons of ethanol and 36.4 million gallons of reformulated ethanol-blended gasoline sales in the prior year. Product sales of our farnesene-derived products increased by $10.0 million in 2012 compared to the prior year. Grants and collaborations revenue in 2012 increased by $6.9 million compared to the prior year primarily due to the revenue recognized upon the amendment of our collaboration agreement with Total which resulted in the recognition of approximately $9.8 million in collaboration revenue, partially offset by a decline in other collaboration revenue of $2.9 million.

Nearly all of our revenues in 2012 and 2011 have come from the sale of ethanol and reformulated ethanol-blended gasoline with the remainder coming from renewable products as well as from collaborations and government grants. We transitioned out of the ethanol and ethanol-blended gasoline business during the third quarter of 2012. We do not expect to be able to replace much of the revenue lost in the near term as a result of this transition, particularly in 2013 while we continue our efforts to establish a renewable products business.

Cost and Operating Expenses

	Years Ended December 31, 2012	Years Ended December 31, 2011	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Cost of products sold	$ 77,314	$ 155,615	$ (78,301)	(50)%
Loss on purchase commitments and write-off of production assets	45,854	—	45,854	nm
Research and development	73,630	87,317	(13,687)	(16)%
Sales, general and administrative	78,718	83,231	(4,513)	(5)%
Total cost and operating expenses	$ 275,516	$ 326,163	$ (50,647)	(16)%

nm= not meaningful

Cost of products sold consists primarily of cost of purchased ethanol and reformulated ethanol-blended gasoline, terminal fees paid for storage and handling, transportation costs between terminals and changes in the fair value of derivative commodity instruments. Starting in the second quarter of 2011, our cost of products sold also included production costs of farnesene-derived products, which included cost of raw materials, amounts paid to contract manufacturers and period costs including inventory write-downs resulting from applying lower-of-cost-or-market inventory valuations. Cost of farnesene-derived products sold also includes certain costs related to the scale-up in production of such products. Our cost of products sold decreased by $78.3 million to $77.3 million in 2012 compared to the prior year. We had a decrease of $91.5 million in costs of ethanol and reformulated ethanol-blended gasoline purchased from third parties primarily due to a decline in product volume partially offset by an increase in average unit cost. This decrease in cost of products sold for ethanol and reformulated ethanol-blended gasoline was partially offset by an increase in product costs of farnesene-derived products of $13.2 million compared to the prior year as we scale up our renewable operations.

We transitioned out of our ethanol and gasoline business in the quarter ended September 30, 2012, which resulted in a reduction of cost of products sold. As we are now operating our own large-scale Biofene production plant in Brotas, in the state of São Paulo, Brazil as of December 2012, we will have a scale-up of production from this facility and the associated manufacturing costs. As we develop cost efficient manufacturing in our first production facility, we expect to seek to work selectively with other Brazilian sugar and ethanol producers to build additional facilities adjacent to their existing mills, thereby reducing the capital required to establish and scale our production operations.

Cost of Products Sold Associated with Loss on Purchase Commitments and Write-Off of Production Assets

Beginning in March 2012, we initiated a plan to shift a portion of our production capacity from contract manufacturing facilities to Amyris-owned plants that were then under construction. As a result, we evaluated our contract manufacturing agreements and, in the first quarter of 2012, recorded a loss of $31.2

million related to facility modification costs and fixed purchase commitments. We also recorded an impairment charge of $5.5 million in the three months ended March 31, 2012 related to Amyris-owned equipment at contract manufacturing facilities, based on the excess of the carrying value of the assets over their fair value. We recognized additional charges of $1.4 million and $7.8 million, respectively, in the third and fourth quarter of 2012 associated with losses on fixed purchase commitments. We computed the loss on facility modification costs and fixed purchase commitments using the same approach that is used to value inventory the lower of cost or market value. The computation of the loss on firm purchase commitments is subject to several estimates, including the ultimate selling price of any of our products manufactured at the relevant production facilities, and is therefore inherently uncertain.

Research and Development Expenses

Our research and development expenses decreased by $13.7 million in 2012 over the prior year, primarily as a result of overall lower spending. The decreases were attributable to a $5.7 million reduction in expenses associated with the completion of certain outsourced process development projects, a $2.5 million decrease in outsourced services resulting from completion of certain phases of our government grants project, $2.2 million reduction in outside consulting expenses, a $1.9 million decrease in personnel-related expenses associated with lower headcount, and a $0.9 million decrease in travel-related expenses and other overhead expenses. Research and development expenses included stock-based compensation expense of $6.5 million in 2012 compared to $6.3 million in 2011.

Sales, General and Administrative Expenses

Our sales, general and administrative expenses decreased by $4.5 million in 2012 compared to the same period of the prior year. The decrease is attributable primarily to a $7.3 million reduction in spend for consulting and professional service fees and a $0.9 million decrease in travel-related expenses partially offset by a $3.6 million increase in personnel-related expenses associated with severance and transition costs and higher stock-based compensation. Sales, general and administrative expenses included stock-based compensation expense of $21.0 million and $19.1 million during 2012 and 2011, respectively.

Other Income (Expense)

	Years Ended December 31, 2012	Years Ended December 31, 2011	Year-to Year Change	Percentage Change
	(Dollars in thousands)			
Other income (expense):				
Interest income	$ 1,472	$ 1,542	$ (70)	(5)%
Interest expense	(4,926)	(1,543)	(3,383)	219%
Income (loss) from change in fair value of derivative instruments	1,790	—	1,790	nm
Income (loss) from extinguishment of debt	(920)	—	(920)	nm
Other income (expense), net	(646)	214	(860)	(402)%
Total other income (expense)	$ (3,230)	$ 213	$ (3,443)	(1,616)%

nm= not meaningful

Total other expense increased by approximately $3.4 million to $3.2 million in 2012 compared to the prior year. The increase in total other expense was related primarily to higher interest expense of $3.4 million associated with increased borrowings to fund our operations including capital expenditures for the coming year, a $0.9 million loss on the extinguishment of the $5.0 million debt associated with the December 2012 private placement, decrease in other income (expense), net for the year ended December 31, 2012 of $0.9 million from realized loss on foreign currency transactions, offset by income of $1.8 million attributable to the income from the change in fair value of the compound embedded derivative liabilities associated with our senior unsecured convertible promissory notes issued to Total of $3.1 million, offset by a $1.3 million loss recognized for the fair market value of a currency interest rate swap derivative liability. No corresponding amounts related to these transactions were recognized during the year ended December 31, 2011.

Liquidity and Capital Resources

	December 31, 2013	December 31, 2012
	(Dollars in thousands)	
Working capital (deficit)	$ (382)	$ 3,668
Cash and cash equivalents and short-term investments	$ 8,296	$ 30,689
Debt and capital lease obligations	$ 153,305	$ 106,774
Accumulated deficit	$ (821,438)	$ (586,327)

	Years Ended December 31, 2013	2012	2011
	(Dollars in thousands)		
Net cash used in operating activities	$ (105,859)	(150,872)	$ (92,496)
Net cash provided by (used in) investing activities	(10,337)	(49,644)	5,853
Net cash provided by financing activities	91,181	138,117	41,052

Working Capital. For the year ended December 31, 2013, we had a working deficit of $0.4 million compared to working capital of $3.7 million for the year ended December 2012. The decrease of $4.1 million in working capital during 2013 is primarily due to cash usage to fund our operating expenses and, to a lesser extent, to service our debt obligations. This was in part offset by a reduction in accounts payable and accrued and other current liabilities of $12.1 million, a $4.4 million increase in accounts receivable and related party accounts receivable due to collaboration receivable, a $4.9 million increase in inventory. Inventory increased during the latter part of 2013 in order that we would have sufficient farnesene inventory while our Brotas plant goes through planned preventive maintenance during the first quarter of 2014.

To support production of our products in contract manufacturing and dedicated production facilities, we have incurred, and we expect to continue to incur, capital expenditures as we invest in these facilities. We plan to continue to seek external debt financing from U.S. and Brazilian sources to help fund our investment in these contract manufacturing and dedicated production facilities.

We expect to fund our operations for the foreseeable future with cash and investments currently on hand, with cash inflows from collaboration and grant funding, cash contributions from product sales, and with new debt and equity financings. Some of our anticipated financing sources, such as research and development collaborations and convertible debt financings, are subject to risk that we cannot meet milestones, are not yet subject to definitive agreements or mandatory funding commitments and, if needed, we may not be able to secure additional types of financing in a timely manner or on reasonable terms, if at all. Our planned 2014 working capital needs and our planned operating and capital expenditures for 2014 are dependent on significant inflows of cash from existing collaboration partners and from funds under existing convertible debt facilities, as well as additional funding from new collaborations, and may also require additional funding from debt or equity financings. We will continue to need to fund our research and development and related activities and to provide working capital to fund production, storage, distribution and other aspects of our business. Our operating plan contemplates capital expenditures of approximately $9.0 million in 2014.

Liquidity. We have incurred significant losses since our inception and believe that we will continue to incur losses and negative cash flow from operations into at least 2014. As of December 31, 2013, we had an accumulated deficit of $821.4 million and had cash, cash equivalents and short term investments of $8.3 million. We have significant outstanding debt and contractual obligations related to purchase commitments, as well as capital and operating leases. As of December 31, 2013, our debt totaled $152.1 million, of which $6.4 million matures within the next twelve months. In addition, our debt agreements contain various covenants, including restrictions on business that could cause us to be at risk of defaults.

The Company's operating plan for 2014 contemplates significant reduction in the Company's net cash outflows, resulting from (i) revenue growth from sales of existing and new products with positive gross margins, (ii) reduced production costs compared to prior periods as a result of manufacturing and technical developments in 2013, (iii) cash inflows from collaborations consistent with levels achieved in 2013 and (iv) operating expenses maintained at reduced levels.

If we are unable to raise additional financing, or if other expected sources of funding are delayed or not received, we would take the following actions as early as the second quarter of 2014 to support our liquidity needs through the remainder of 2014 and into 2015:

- Effect significant headcount reductions in the United States and in Brazil, particularly with respect to both general and administrative employees and other employees not connected to critical or contracted activities.
- Shift our focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.
- Reduce our expenditures for third party contractors, including consultants, professional advisors and other vendors.
- Suspend operations at our pilot plants and demonstration facilities.
- Reduce or delay uncommitted capital expenditures, including non-essential lab equipment and information technology projects.

The contingency cash plan contemplating these actions is designed to save us an estimated $25.0 million to $35.0 million over the next twelve months. Implementing this plan could have a material negative impact on our ability to continue our business as currently contemplated, including, without limitation, delays or failures in its ability to:

- Achieve planned production levels;
- Develop and commercialize products within planned timelines or at planned scales; and
- Continue other core activities.

Furthermore, any inability to scale-back operations as necessary, and any unexpected liquidity needs, could create pressure to implement more severe measures. Such measures could have a material adverse effect on our ability to meet contractual requirements, including obligations to maintain manufacturing operations, and increase the severity of the consequences described above.

Collaboration Funding. In March 2013, we signed a collaboration agreement with a collaboration partner that included a collaboration funding component and that resulted in an initial payment of $10 million in March 2013, and we obtained a commitment letter from Total with respect to additional convertible note funding (as described above under “Overview — Total Relationship”) of which we received $10.0 million in proceeds in June 2013. We also received $20.0 million in funding through the sale of a convertible note in a private placement under an existing funding agreement with Total in July 2013. This purchase and sale completed Total’s commitment to purchase $30.0 million of such notes by July 2013.

In addition to cash contributions from product sales and debt and equity financings, we depend on collaboration funding to support our operating expenses. While part of this funding is committed based on existing collaboration agreements, we will be required to identify and obtain funding under additional collaborations that are not yet subject to any definitive agreement or are not yet identified. In addition, some of our existing collaboration funding is subject to our achievement of milestones or other funding conditions.

If we cannot secure sufficient collaboration funding to support our operating expenses in excess of cash contributions from product sales and existing debt and equity financings, in order to raise sufficient funds to finance our ongoing operations, we may need to issue additional preferred and/or discounted equity, agree to onerous covenants, grant further security interests in our assets, enter into collaboration and licensing arrangements that require us to relinquish commercial rights or grant licenses on terms that are not favorable to us. If we fail to secure such funding, we could be forced to curtail our operations, which would have a material adverse effect on our ability to continue with our business plans and on our status as a going concern.

Government Contracts. In 2010, we were awarded a $24.3 million "Integrated Bio-Refinery" grant from the DOE. Under this grant, we were required to fund an additional $10.6 million in cost sharing expenses. Our obligation for this cost share was contingent on reimbursement for project costs incurred. The "Integrated Bio-Refinery" project from DOE was completed in the first quarter of 2013. Through December 31, 2013, we had recognized the entire $24.3 million in revenue under this grant, of which $1.8 million was received in cash during the year ended December 31, 2013.

In August 2010, we were appointed as a subcontractor to NREL under a DOE grant awarded to NREL. Under this contract, we have the right to be reimbursed for up to $3.6 million, and are required to fund an additional $1.4 million in cost sharing expenses. Through December 31, 2013, we had recognized $3.6 million in revenue under this grant, of which $2.3 million was received in cash during the year ended December 31, 2013.

In June 2012, we entered into a Technology Investment Agreement with DARPA, under which we are performing certain research and development activities funded in part by DARPA. The work is to be performed on a cost-share basis, where DARPA funds 90% of the work and we fund the remaining 10% (primarily by providing specified labor). The agreement provided for funding of up to approximately $7.7 million over two years based on achievement of program milestones, and, accordingly, if fully funded, we would be responsible for contributions equivalent to approximately $0.9 million. The agreement had an initial term of one year and at DARPA's option, may be renewed for an additional year. The agreement was renewed by DARPA in May 2013. Through December 31, 2013, we had recognized $5.3 million in revenue under this agreement, of which $4.9 million was recognized during the year ended December 31, 2013.

Convertible Note Offerings. In February 2012, we sold $25.0 million in principal amount of senior unsecured convertible promissory notes due March 1, 2017. The notes have a 3.0% annual interest rate and are convertible into shares of our common stock at a conversion price of $7.0682 per share, subject to adjustment for proportional adjustments to outstanding common stock and anti-dilution provisions in case of dividends and distributions. The note holders have a right to require repayment of 101% of the principal amount of the notes in an acquisition of Amyris, and the notes provide for payment of unpaid interest on conversion following such an acquisition if the note holders do not require such repayment. The securities purchase agreement and notes include covenants regarding payment of interest, maintaining our listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the securities purchase agreement and notes, with default interest rates and associated cure periods applicable to the covenant regarding SEC reporting.

In July and September 2012, we issued $53.3 million worth of senior unsecured convertible notes to Total for an aggregate of $30.0 million in cash proceeds and our repayment of $23.3 million in previously-provided research and development funds as described in more detail in Note 5, "Debt" and Note 8, "Significant Agreements". As part of the December 2012 private placement, 1,677,852 shares of our common stock were issued in exchange for the cancellation of $5.0 million worth of an outstanding senior unsecured convertible promissory note held by Total.

In August 2013, we entered into an agreement with Total and Temasek to sell up to $73.0 million in convertible promissory notes in private placements over a period of up to 24 months from the date of signing (referred to as the August 2013 SPA and such financing is referred to as the August 2013 Financing). The August 2013 Financing was divided into two tranches (one for $42.6 million and one for $30.4 million), each with differing closing conditions. Of the total possible purchase price in the financing, $60.0 million was to be paid in the form of cash by Temasek ($35.0 million in the first tranche and up to $25.0 million in the second tranche) and $13.0 million was to be paid by cancellation of outstanding convertible promissory notes held by Total in connection with its exercise of pro rata rights ($7.6 million in the first tranche and $5.4 million in the second tranche).

In September 2013, prior to the initial closing of the August 2013 Financing, our stockholders approved the issuance in the private placement of up to $110.0 million aggregate principal amount of senior convertible promissory notes, the issuance of a warrant to purchase 1,000,000 shares of our common stock and the issuance of the common stock issuable upon conversion or exercise of such notes and warrant, which approval included the transactions contemplated by the August 2013 Financing.

In September 2013, we entered into a bridge loan agreement with an existing investor to provide additional cash availability of up to $5.0 million as needed before the initial closing of the August 2013 Financing. The bridge loan agreement provided for the sale of up to $5.0 million in principal amount of unsecured convertible notes at any time prior to October 31, 2013 following the satisfaction of certain closing conditions, including that we pay an availability fee for the bridge loan. We did not use this facility and it expired in October 2013 in accordance with its terms.

In October 2013, we sold and issued a senior secured promissory note to Temasek for a bridge loan of $35.0 million (referred to as the Temasek Bridge Note). The note was due on February 2, 2014 and accrued interest at a rate of 5.5% each four months from October 4, 2013 (with a rate of 2% per month applicable if a default occurred). The note was cancelled as payment for Temasek's purchase of a first tranche convertible note in the initial closing of the August 2013 Financing.

In October 2013, we amended the August 2013 SPA to include the Fidelity Entities in the first tranche in the principal amount of $7.6 million, and to proportionally increase the amount acquired by exchange and cancellation of outstanding convertible promissory notes by Total to $14.6 million ($9.2 million in the first tranche and up to $5.4 million in the second tranche). Also in October 2013, we completed the closing of the Tranche I Notes for cash proceeds of $7.6 million and cancellation of outstanding convertible promissory notes of $44.2 million, of which $35.0 million resulted from the cancellation of the Temasek Bridge Note. In December 2013, we agreed to place $3.0 million of senior convertible notes under the second tranche of the August 2013 Financing to funds affiliated with Wolverine Asset Management (or Wolverine) and we elected to call $25.0 million in additional funds from Temasek pursuant to its previous commitment to purchase such amount of convertible promissory notes in the second tranche. Additionally, in December 2013, we agreed to sell approximately $6.0 million of convertible promissory notes in the second tranche to Total through cancellation of the same amount of principal of previously outstanding convertible notes held by Total (in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation of indebtedness). In January 2015, we completed the offering of such convertible promissory notes in the second tranche.

Export Financing with ABC Brasil. In March 2013, we entered into an export financing agreement with Banco ABC Brasil S.A. (or ABC) for approximately $2.5 million, to fund exports through March 2014. As of December 31, 2013, the principal amount outstanding was $2.5 million. This loan is collateralized by future exports from our subsidiary in Brazil.

In March 2014, we entered into an export financing agreement with ABC Bank for R$5.0 million (approximately US$2.2 million based on exchange rate as of March 28, 2014) for a 1 year-term to fund exports through March 2015.

Banco Pine Loans. In December 2011, we received a loan of R$35.0 million (approximately US$14.9 million based on the exchange rate as of December 31, 2013) from Banco Pine. Such loan was an advance on an anticipated 2012 financing from Nossa Caixa Desenvolvimento (or Nossa Caixa), the São Paulo State development bank, and Banco Pine, under which Banco Pine and Nossa Caixa would provide us with loans of up to approximately R$52.0 million (approximately $25.6 million based on the exchange rate as of December 31, 2013) as financing for capital expenditures relating to our manufacturing facility in Brotas. The maturity date for this loan was originally February 17, 2012; however, in February 2012, we entered into a supplemental agreement with Banco Pine under which the parties agreed to extend the maturity date for the repayment of the original loan from February 17, 2012 to May 17, 2012, and in May 2012, we entered into an additional supplemental extending the maturity date to August 15, 2012. This loan was repaid in July 2012.

In June 2012, we entered into a separate loan agreement with Banco Pine under which Banco Pine provided a bridge loan of R$52.0 million (approximately US$22.2 million based on the exchange rate as of December 31, 2013). The bridge loan was an additional advance on the anticipated Banco Pine and Nossa Caixa financing described above. The interest rate for the bridge loan was 0.4472% monthly (approximately 5.5% on an annualized basis). The principal and interest of this bridge loan matured and were required to be repaid on September 19, 2012, subject to extension by Banco Pine. This bridge loan was repaid in July 2012.

We secured these loans to allow us to continue construction and process development at our manufacturing facility in Brotas, Brazil and we expect to seek additional loans from this bank and others in order to be able to fund the establishment of other plants in Brazil and elsewhere.

Banco Pine/Nossa Caixa Financing. In July 2012, we entered into a Note of Bank Credit and a Fiduciary Conveyance of Movable Goods agreement with each of Nossa Caixa Desenvolvimento (or Nossa Caixa) and Banco Pine S.A. (or Banco Pine). Under these instruments, we borrowed an aggregate of R$52.0 million (approximately US$22.2 million based on the exchange rate as of December 31, 2013) as financing for capital expenditures relating to our manufacturing facility in Brotas, Brazil. Under the loan agreements, Banco Pine agreed to lend R$22.0 million and Nossa Caixa agreed to lend R$30.0 million. The loans have a final maturity date of July 15, 2022 and bear a fixed interest rate of 5.5% per year. The loans are also subject to early maturity and delinquency charges upon occurrence of certain events including interruption of manufacturing activities at our manufacturing facility in Brotas, Brazil for more than 30 days, except during sugarcane off-season. The loans are secured by certain of our farnesene production assets at the manufacturing facility in Brotas, Brazil and we were required to provide parent guarantees to each of the lenders.

BNDES Credit Facility. In December 2011, we entered into a credit facility with Banco Nacional de Desenvolvimento Econômico e Social (or BNDES), a government-owned bank headquartered in Brazil (referred to as the BNDES Credit Facility) to finance a production site in Brazil. The BNDES Credit Facility was for R$22.4 million (approximately US$9.6 million based on the exchange rate as of December 31, 2013). This BNDES Credit Facility was extended as project financing for a production site in Brazil. The credit line is divided into an initial tranche for up to approximately R$19.1 million and an additional tranche of approximately R$3.3 million that becomes available upon delivery of additional guarantees. The credit line is available for 12 months from the date of the Credit Agreement for the BNDES Credit Facility, subject to extension by the lender.

The principal of loans under the BNDES Credit Facility is required to be repaid in 60 monthly installments, with the first installment due in January 2013 and the last due in December 2017. Interest was initially due on a quarterly basis with the first installment due in March 2012. From and after January 2013, interest payments will be due on a monthly basis together with principal payments. The loaned amounts carry interest of 7% per year. Additionally, a credit reserve charge of 0.1% on the unused balance from each credit installment from the day immediately after it is made available through its date of use, when it is paid.

The BNDES Credit Facility is collateralized by first priority security interest in certain of our equipment and other tangible assets totaling R$24.9 million (approximately US$10.6 million based on the exchange rate as of December 31, 2013). We are a parent guarantor for the payment of the outstanding balance under the BNDES Credit Facility. Additionally, we were required to provide a bank guarantee equal to 10% of the total approved amount (R$22.4 million in total debt) available under the BNDES Credit Facility. For advances in the second tranche (above R$19.1 million), we are required to provide additional bank guarantees equal to 90% of each such advance, plus additional Amyris guarantees equal to at least 130% of such advance. The BNDES Credit Facility contains customary events of default, including payment failures, failure to satisfy other obligations under the credit facility or related documents, defaults in respect of other indebtedness, bankruptcy, insolvency and inability to pay debts when due, material judgments, and changes in control of Amyris Brasil. If any event of default occurs, BNDES may terminate its commitments and declare immediately due all borrowings under the facility. As of December 31, 2013 and 2012, the Company had R$15.3 million (approximately US$6.5 million based on the exchange rate as of December 31, 2013) and R$19.1 million (approximately US$9.3 million based on the exchange rate as of December 31, 2012), respectively, in outstanding advances under the BNDES Credit Facility.

FINEP Credit Facility. In November 2010, we entered into a credit facility with Financiadora de Estudos e Projetos (or FINEP), a state-owned company subordinated to the Brazilian Ministry of Science and Technology (referred to as the FINEP Credit Facility) to finance a research and development project on sugarcane-based biodiesel (referred to as the FINEP Project) and provided for loans of up to an aggregate principal amount of R$6.4 million (approximately US$2.7 million based on the exchange rate as of December 31, 2013) which are secured by a chattel mortgage on certain equipment of Amyris as well as by bank letters of guarantee. All available credit under this facility was fully drawn.

Interest on loans drawn under the FINEP Credit Facility is fixed at 5.0% per annum. In case of default under, or non-compliance with, the terms of the agreement, the interest on loans will be dependent on the long-term interest rate as published by the Central Bank of Brazil (such rate, the TJLP). If the TJLP at the time of default is greater than 6%, then the interest will be 5.0% plus a TJLP adjustment factor otherwise the interest will be at 11.0% per annum. In addition, a fine of up to 10.0% will apply to the amount of any obligation in default. Interest on late balances will be 1.0% interest per month, levied on the overdue amount. Payment of the outstanding loan balance will be made in 81 monthly installments, which commenced in July 2012 and extends through March 2019. Interest on loans drawn and other charges are paid on a monthly basis and commenced in March 2011. As of December 31, 2013, total outstanding loan balance under this credit facility was R$5.2 million (approximately $2.2 million based on the exchange rate as of December 31, 2013).

The FINEP Credit Facility contains the following significant terms and conditions:

- We are required to share with FINEP the costs associated with the FINEP Project. At a minimum, we are required to contribute approximately R$14.5 million (US$6.2 million based on the exchange rate as of December 31, 2013) of which R$11.1 million was contributed prior to the release of the second disbursement. All four disbursements were completed and we had fulfilled all of our cost sharing obligations;
- After the release of the first disbursement, prior to any subsequent drawdown from the FINEP Credit Facility, we were required to provide bank letters of guarantee of up to R$3.3 million in aggregate (approximately US$1.4 million based on the exchange rate as of December 31, 2013) before receiving the second installment in December 2012. We obtained the bank letters of guarantee from ABC;
- Amounts disbursed under the FINEP Credit Facility were required to be used towards the FINEP Project within 30 months after the contract execution.

The fair values of the notes payable, loan payable, convertible notes and credit facilities are based on the present value of expected future cash flows and assumptions about current interest rates and the creditworthiness of the Company that market participants would use in pricing the debt.

Hercules Loan Facility. In March 2014, we entered into a loan and security agreement with Hercules Technology Growth Capital, Inc. to make available to Amyris a loan in the aggregate principal amount of up to $25.0 million (referred to as the Hercules Loan Facility). The Hercules Loan Facility generally becomes due on May 31, 2015 and accrues interest at a rate per annum equal to the greater of either the prime rate reported in the Wall Street Journal plus 6.25% or 9.5%. The maturity date is extended to May 31, 2017 if the Company completes a financing transaction for at least $50.0 million in additional cash proceeds by September 30, 2014. The Company may repay the loaned amounts before the maturity date if it pays an additional fee of 3% of the outstanding loans (1% if after the initial twelve-month period). The Company is also required to pay a 1% facility charge at the closing of the transaction, and a 10% end of term charge. In connection with the Hercules Loan Facility, Amyris agreed to certain customary representations and warranties and covenants, as well as certain covenants with respect to obtaining additional financing as described above and performance covenants related to revenues and cash flows starting with the third quarter of 2014. If the Company does not achieve the equity financing covenant, a forbearance fee of $10.0 million becomes due and is required to be paid at the end of the initial term of the facility.

Common Stock Offerings. In February 2012, we sold 10,160,325 shares of our common stock in a private placement for aggregate offering proceeds of $58.7 million.

In May 2012, we completed a private placement of 1,736,100 shares of our common stock for aggregate cash proceeds of $4.1 million.

In December 2012, we completed a private placement of 14,177,849 shares common stock for aggregate proceeds of $37.2 million, of which $22.2 million in cash was received in December 2012 and $15.0 million in cash was received in January 2013. As part of this private placement, 1,677,852 of such shares were issued to Total in exchange for the cancellation of $5.0 million worth of an outstanding senior unsecured convertible promissory note we previously issued to Total.

In March 2013, we completed a private placement of 1,533,742 of our common stock to Biolding for aggregate proceeds of $5.0 million. This private placement represented the final tranche of Biolding's preexisting contractual obligation to fund $15.0 million upon satisfaction by us of certain criteria associated with the commissioning of our production plant in Brotas, Brazil.

In March 2014, we entered into a securities purchase agreement with Kuraray Co., Ltd. under which the we agreed to sell shares of its common stock at a price equal to the greater of $2.88 per share or the average daily closing prices per share on the NASDAQ Stock Market for the three month period ending March 27, 2014 for an aggregate purchase price of $4.0 million.

Cash Flows during the Years Ended December 31, 2013, 2012, and 2011

Cash Flows from Operating Activities

Our primary uses of cash from operating activities are cost of products sold and personnel-related expenditures offset by cash received from product sales, grants and collaborative research. Cash used in operating activities was $105.9 million, $150.9 million and $92.5 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Net cash used in operating activities of $105.9 million for the year ended December 31, 2013 was related to our net loss of $234.9 million and a $23.7 million net change in our operating assets and liabilities, offset by non-cash charges of $152.8 million. Net change in operating assets and liabilities of $23.7 million primarily consisted of a $4.8 million increase in accounts receivable and related party accounts receivable from collaborations, a $5.6 million increase in inventory during the latter part of 2013 to have sufficient farnesene inventory while the Brotas plant goes through its annual planned preventive maintenance during first quarter of 2014, a $2.7 million increase in prepaid expenses and other assets, a $9.4 million decrease in accrued and other long term liabilities, a $2.6 million decrease in accounts payable and a $0.2 million decrease in deferred rent, offset by a $1.6 million decrease in deferred revenue and a $0.1 million decrease in derivative liability. Non-cash charges of $152.8 million consisted primarily of an $84.7 million change in the fair value of derivative instruments related to the embedded derivative liabilities associated with our senior secured convertible promissory notes and currency interest rate swap derivative liability, $16.6 million of depreciation and amortization expenses, $18.0 million of stock-based compensation, $3.7 million of amortization of debt discount, $19.9 million loss associated with the extinguishment of convertible debt and $9.4 million loss on purchase commitments and write-off of production assets related to a termination and settlement of our existing agreement with Tate & Lyle and Antibioticos.

Significant operating cash inflows during the year ended December 31, 2013 were derived primarily from the sale of renewable products and from collaborative research services.

Net cash used in operating activities of $150.9 million for the year ended December 31, 2012 was related to our net loss of $206.0 million and a $33.5 million net change in our operating assets and liabilities, offset by non-cash charges of $88.7 million. The net change in operating assets and liabilities of $33.5 million primarily consisted of a $35.8 million decrease in accrued and other long term liabilities, a $11.8 million decrease in accounts payable, a $1.6 million decrease in deferred revenue and a $1.3 million increase in deferred rent, offset by a $2.8 million decrease in accounts receivable, a $2.9 million decrease in inventory, an $11.2 million decrease in prepaid expenses and other assets. Non-cash charges of $88.7 million consisted primarily of $45.9 million loss on purchase commitments and write-off of production assets at contract manufacturers, $27.5 million of stock-based compensation and $14.6 million of depreciation and amortization expenses.

Net cash used in operating activities of $92.5 million for the year ended December 31, 2011 was related to our net loss of $179.5 million partially offset by non-cash charges of $37.5 million and a $49.5 million net change in our operating assets and liabilities. Net change in operating assets and liabilities of $49.5 million primarily consisted of a $53.9 million increase in accrued and other long term liabilities of which $31.9 million was due to the contingently repayable advance from Total, a $15.6 million increase in accounts payable and a $5.5 million increase in deferred revenue, partially offset by a $5.3 million increase in inventory, a $17.3 million increase in prepaid expenses and other assets, a $2.0 million increase in accounts receivable and a $1.1 million reduction in deferred rent. Non-cash charges primarily included $25.5 million of stock-based compensation and $11.1 million of depreciation and amortization expenses.

Cash Flows from Investing Activities

Our investing activities consist primarily of capital expenditures and investment activities.

Net cash used in investing activities of $10.3 million for the year ended December 31, 2013, was a result of $8.1 million of capital expenditures and deposits on property, plant and equipment due to the construction of our first owned production facility in Brotas, Brazil, $1.5 million net purchases of short-term investments and $0.7 million of restricted cash.

Net cash used in investing activities of $49.6 million for the year ended December 31, 2012, was a result of $56.9 million of capital expenditures and deposits on property, plant, and equipment due primarily to the construction of our first owned production facility in Brotas, Brazil and $1.0 million of restricted cash, offset by net sales of short term investments of $8.2 million.

Net cash provided by investing activities of $5.9 million for the year ended December 31, 2011, was a result of $105.0 million in net investment securities maturities and $0.3 million in acquisition of cash in noncontrolling interest offset by a $97.0 million of capital expenditures and deposits on property, plant and equipment and a $2.9 million payment to Draths Corporation in relation to a business acquisition.

Cash Flows from Financing Activities

Net cash provided by financing activities of $91.2 million for the year ended December 31, 2013, was a result of the net receipt of $75.5 million from debt financings, of which $65.0 million is debt financing from related parties, the receipt of $20.0 million in proceeds from sales of common stock in private placements net of issuance cost, and the receipt of $0.3 million in proceeds from option exercises. These cash inflows were offset in part by principal payments on debt of $3.3 million and principal payments on capital leases of $1.4 million.

Net cash provided by financing activities of $138.1 million for the year ended December 31, 2012, was a result of the net receipt of $108.9 million from debt financings, of which $30.0 million is debt financing from a related party, the receipt of $84.7 million in proceeds from sales of common stock in private placements net of issuance cost, and the receipt of $0.9 million in proceeds from option exercises. These cash inflows were offset in part by principal payments on debt of $52.6 million and principal payments on capital leases of $3.7 million.

Net cash provided by financing activities was $41.1 million for the year ended December 31, 2011, was a result of the net receipt of $38.0 million from debt financings, the receipt of $8.4 million in proceeds from option exercises, and the receipt of $3.0 million in equipment financing. These cash inflows were offset in part by principal payments on debt of $5.0 million, principal payments on capital leases of $2.8 million, and $0.5 million in costs related to the initial public offering of our common stock.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any material off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our consolidated financial statements.

Contractual Obligations

The following is a summary of our contractual obligations as of December 31, 2013 (in thousands):

	Total	2014	2015	2016	2017	2018	Thereafter
Principal payments on long-term debt	$179,964	$ 6,391	$ 4,833	$ 4,833	$ 98,949	$55,024	$ 9,934
Interest payments on long-term debt, fixed rate[(1)]	46,873	2,675	2,200	1,916	5,564	33,528	990
Operating leases	65,132	6,404	6,622	6,600	6,580	6,667	32,259
Principal payments on capital leases	1,244	956	288	—	—	—	—
Interest payments on capital leases	52	50	2	—	—	—	—
Terminal storage costs	128	94	34	—	—	—	—
Purchase obligations[(2)]	9,627	8,296	507	532	250	42	—
Total	$303,020	$24,866	$14,486	$13,881	$111,343	$95,261	$43,183

(1) Does not include any obligations related to make-whole interest or downround provisions. The fixed interest rates are more fully described in Note 5, "Debt" of our consolidated financial statements.

(2) Purchase obligations include noncancellable contractual obligations and construction commitments of $8.9 million, of which $4.0 million have been accrued as loss on purchase commitments.

This table does not reflect non-reimbursable expenses that we expect to incur in 2014 in connection with research activities under the NREL subcontract discussed above under the caption "Liquidity and Capital Resources — Government Contracts."

Additionally, this table does not reflect the expenses that we expect to incur in 2014 in connection with research activities under DARPA under which we will perform certain research and development activities funded in part by DARPA. The work is to be performed on a cost-share basis, where DARPA funds 90% of the work and we fund the remaining 10% (primarily by providing specified labor). Under the agreement, we could receive funding of up to approximately $7.7 million over two years based on achievement of program milestones, and, accordingly, we would be responsible for contributions equivalent to approximately $0.9 million.

Recent Accounting Pronouncements

The information contained in Note 2 to the Consolidated Financial Statements under the heading "Recent Accounting Pronouncements" is hereby incorporated by reference into this Part II, Item 7.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The market risk inherent in our market risk sensitive instruments and positions is the potential loss arising from adverse changes in: commodity market prices, foreign currency exchange rates, and interest rates as described below.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and our outstanding debt obligations. We generally invest our cash in investments with short maturities or with frequent interest reset terms. Accordingly, our interest income fluctuates with short-term market conditions. As of December 31, 2013, our investment portfolio consisted primarily of money market funds and certificates of deposit, all of which are highly liquid investments. Due to the short-term nature of our investment portfolio, our exposure to interest rate risk is minimal. Additionally, as of December 31, 2013, 100% of our outstanding debt is in fixed rate instruments.

Foreign Currency Risk

Most of our sales contracts are principally denominated in U.S. dollars and, therefore, our revenues are not currently subject to significant foreign currency risk. The functional currency of our wholly-owned consolidated subsidiary in Brazil is the local currency (Brazilian real) in which recurring business transactions occur. We do not use currency exchange contracts as hedges against amounts permanently invested in our foreign subsidiary. The amount we consider permanently invested in our foreign subsidiary and translated into U.S. dollars using the year end exchange rate is $145.2 million at December 31, 2013 and $76.7 million at December 31, 2012. The increase in the permanent investments in our foreign subsidiary between 2012 and 2013 is due to additional capital contributions made which includes the conversion of approximately R$89.7 million (US$39.7 million based on the exchanges rate as of December 31, 2013) of intercompany loans into equity in our wholly-owned consolidated subsidiary in Brazil which is partially offset by the depreciation of the Brazilian real versus the U.S. dollar and an increase in accumulated deficit of our wholly-owned consolidated subsidiary in Brazil. The potential loss in fair value, which would principally be recognized in Other Comprehensive Income (Loss), resulting from a hypothetical 10% adverse change in quoted Brazilian real exchange rates is $14.5 million and $7.7 million for 2013 and 2012, respectively. Actual results may differ.

We make limited use of derivative instruments, which includes currency interest rate swap agreements, to manage the Company's exposure to foreign currency exchange rate and interest rate related to the Company's Banco Pine loan. In June 2012, we entered into a currency interest rate swap arrangement with Banco Pine for R$22.0 million (approximately US$9.4 million based on the exchange rate as of December 31, 2013). The swap arrangement exchanges the principal and interest payments under the Banco Pine loan entered into in July 2012 for alternative principal and interest payments that are subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap has a fixed interest rate of 3.94%. This arrangement hedges the fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real.

Commodity Price Risk

Our primary exposure to market risk for changes in commodity prices currently relates to our purchases of sugar feedstocks. When possible, we manage our exposure to this risk primarily through the use of supplier pricing agreements.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

AMYRIS, INC.

Index to Financial Statements and Financial Statement Schedules

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Amyris, Inc.:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Amyris, Inc and its subsidiaries at December 31, 2013 and December 31, 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
San Jose, California
April 1, 2014

Amyris, Inc.

Consolidated Balance Sheets
(In Thousands, Except Share and Per Share Amounts)

	December 31, 2013	December 31, 2012
Assets		
Current assets:		
Cash and cash equivalents	$ 6,868	$ 30,592
Short-term investments	1,428	97
Accounts receivable, net of allowance of $479 and $481, respectively	7,734	3,846
Related party accounts receivable	484	—
Inventories, net	10,888	6,034
Prepaid expenses and other current assets	9,518	8,925
Total current assets	36,920	49,494
Property, plant and equipment, net	140,591	163,121
Restricted cash	1,648	955
Other assets	10,585	20,112
Goodwill and intangible assets	9,120	9,152
Total assets	$ 198,864	$ 242,834
Liabilities and Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 6,512	$ 15,392
Deferred revenue	2,222	1,333
Accrued and other current liabilities	21,221	24,410
Capital lease obligation, current portion	956	1,366
Debt, current portion	6,391	3,325
Total current liabilities	37,302	45,826
Capital lease obligation, net of current portion	287	1,244
Long-term debt, net of current portion	56,172	61,806
Related party debt	89,499	39,033
Deferred rent, net of current portion	10,191	8,508
Deferred revenue, net of current portion	5,000	4,255
Derivative liability	134,717	9,261
Other liabilities	1,544	6,672
Total liabilities	334,712	176,605
Commitments and contingencies (Note 6)		
Stockholders' equity (deficit):		
Preferred stock – $0.0001 par value, 5,000,000 shares authorized, none issued and outstanding	—	—
Common stock – $0.0001 par value, 200,000,000 and 100,000,000 shares authorized as of December 31, 2013 and 2012; 76,662,812 and 68,709,660 shares issued and outstanding as of December 31, 2013 and 2012, respectively	8	7
Additional paid-in capital	706,253	666,233
Accumulated other comprehensive loss	(20,087)	(12,807)
Accumulated deficit	(821,438)	(586,327)
Total Amyris, Inc. stockholders' equity (deficit)	(135,264)	67,106
Noncontrolling interest	(584)	(877)
Total stockholders' equity (deficit)	(135,848)	66,229
Total liabilities and stockholders' equity (deficit)	$ 198,864	$ 242,834

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.

Consolidated Statements of Operations
(In Thousands, Except Share and Per Share Amounts)

	Years Ended December 31,		
	2013	2012	2011
Revenues			
Renewable product sales	$ 14,428	$ 10,802	$ 763
Related party renewable product sales	1,380	—	—
Ethanol and ethanol-blended gasoline	—	38,836	129,074
Total product sales	15,808	49,638	129,837
Grants and collaborations revenue	22,664	14,281	17,154
Related party grants and collaborations revenue	2,647	9,775	—
Total grants and collaborations revenue	25,311	24,056	17,154
Total revenues	41,119	73,694	146,991
Cost and operating expenses			
Cost of products sold	38,253	77,314	155,615
Loss on purchase commitments and write off of production assets	9,366	45,854	—
Research and development	56,065	73,630	87,317
Sales, general and administrative	57,051	78,718	83,231
Total cost and operating expenses	160,735	275,516	326,163
Loss from operations	(119,616)	(201,822)	(179,172)
Other income (expense):			
Interest income	162	1,472	1,542
Interest expense	(9,107)	(4,926)	(1,543)
Income (loss) from change in fair value of derivative instruments	(84,726)	1,790	—
Income (loss) from extinguishment of debt	(19,914)	(920)	—
Other income (expense), net	(2,553)	(646)	214
Total other income (expense)	(116,138)	(3,230)	213
Loss before income taxes	(235,754)	(205,052)	(178,959)
Benefit (provision) for income taxes	847	(981)	(552)
Net loss	$ (234,907)	$ (206,033)	$ (179,511)
Net (income) loss attributable to noncontrolling interest	(204)	894	641
Net loss attributable to Amyris, Inc. common stockholders	$ (235,111)	$ (205,139)	$ (178,870)
Net loss per share attributable to common stockholders, basic and diluted	$ (3.12)	$ (3.62)	$ (3.99)
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic and diluted	75,472,770	56,717,869	44,799,056

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.

Consolidated Statements of Comprehensive Loss
(In Thousands)

	Years Ended December 31,		
	2013	2012	2011
Comprehensive loss:			
Net loss	$ (234,907)	$ (206,033)	$ (179,511)
Change in unrealized loss on investments	—	—	(5)
Foreign currency translation adjustment, net of tax	(7,191)	(6,626)	(8,761)
Total comprehensive loss	(242,098)	(212,659)	(188,277)
Income (loss) attributable to noncontrolling interest	(204)	894	641
Foreign currency translation adjustment attributable to noncontrolling interest	(89)	(257)	(30)
Comprehensive loss attributable to Amyris, Inc.	$ (242,391)	$ (212,022)	$ (187,666)

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.

Consolidated Statements of Stockholders' Equity (Deficit)
(In Thousands, Except Share and Per Share Amounts)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interest	Total Equity (Deficit)
December 31, 2010	43,847,425	$ 4	$ 506,988	$ (202,318)	$ 2,872	$ 2	$ 307,548
Issuance of common stock upon exercise of stock options, net of restricted stock	1,641,439	1	8,491	—	—	—	8,492
Issuance of common stock upon net exercise of warrants	77,087	—	—	—	—	—	—
Issuance of common stock warrants in connection with equipment financing	—	—	193	—	—	—	193
Issuance of common stock in connection with Draths business acquisition	362,319	—	7,000	—	—	—	7,000
Shares issued from restricted stock unit settlement	6,005	—	—	—	—	—	—
Repurchase of common stock	(1,137)	—	(5)	—	—	—	(5)
Stock-based compensation	—	—	25,492	—	—	—	25,492
Fair value of assets and liabilities assigned to noncontrolling interest	—	—	—	—	—	369	369
Change in unrealized loss on investments	—	—	—	—	(5)	—	(5)
Foreign currency translation adjustment, net of tax	—	—	—	—	(8,791)	30	(8,761)
Net loss	—	—	—	(178,870)	—	(641)	(179,511)
December 31, 2011	45,933,138	$ 5	$ 548,159	$ (381,188)	$ (5,924)	$ (240)	$ 160,812
December 31, 2011	45,933,138	$ 5	$ 548,159	$ (381,188)	$ (5,924)	$ (240)	$ 160,812
Issuance of common stock upon exercise of stock options, net of restricted stock	1,441,676	—	1,509	—	—	—	1,509
Issuance of common stock in a private placement, net of issuance cost of $392	21,040,717	2	89,680	—	—	—	89,682
Recovery of shares from Draths escrow	(5,402)	—	—	—	—	—	—
Shares issued from restricted stock unit settlement	299,584	—	(588)	—	—	—	(588)
Repurchase of common stock	(53)	—	—	—	—	—	
Stock-based compensation	—	—	27,473	—	—	—	27,473
Foreign currency translation adjustment, net of tax	—	—	—	—	(6,883)	257	(6,626)
Net loss	—	—	—	(205,139)	—	(894)	(206,033)
December 31, 2012	68,709,660	$ 7	$ 666,233	$ (586,327)	$ (12,807)	$ (877)	$ 66,229
December 31, 2012	68,709,660	$ 7	$ 666,233	$ (586,327)	$ (12,807)	$ (877)	$ 66,229
Issuance of common stock upon exercise of stock options, net of restricted stock	777,099	—	1,489	—	—	—	1,489
Issuance of common stock in a private placement, net of issuance cost of $21	6,567,299	1	19,979	19,980			
Shares issued from restricted stock unit settlement	608,754	—	(825)	—	—	—	(825)
Issuance of common stock warrants in connection with issuance of convertible promissory note	1,330	1,330					
Stock-based compensation	—	—	18,047	—	—	—	18,047
Foreign currency translation adjustment, net of tax	—	—	—	—	(7,280)	89	(7,191)
Net loss	—	—	—	(235,111)	—	204	(234,907)
December 31, 2013	76,662,812	$ 8	$ 706,253	$ (821,438)	$ (20,087)	$ (584)	$ (135,848)

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.

Consolidated Statements of Cash Flows
(In Thousands)

	Years Ended December 31,		
	2013	2012	2011
Operating activities			
Net loss	$ (234,907)	$ (206,033)	$ (179,511)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	16,639	14,570	11,077
Loss on disposal of property, plant and equipment	176	370	52
Stock-based compensation	18,047	27,473	25,492
Amortization of premium on investments	—	—	630
Amortization of debt discount	3,683	838	—
Loss on extinguishment of debt	19,914	920	—
Provision for doubtful accounts	—	236	245
Loss on purchase commitments and write-off of production assets	9,366	45,854	—
Change in fair value of derivative instruments	84,726	(1,764)	—
Other noncash expenses	211	159	40
Changes in assets and liabilities:			
Accounts receivable	(4,365)	2,837	(1,975)
Related party accounts receivable	(484)	—	—
Inventories, net	(5,612)	2,919	(5,327)
Prepaid expenses and other assets	(2,743)	11,239	(17,250)
Accounts payable	(2,636)	(11,811)	15,648
Accrued and other liabilities	(9,386)	(35,754)	53,894
Derivative liability	111	—	—
Deferred revenue	1,634	(1,648)	5,542
Deferred rent	(233)	(1,277)	(1,053)
Net cash used in operating activities	(105,859)	(150,872)	(92,496)
Investing activities			
Purchase of short-term investments	(2,795)	(8,334)	(67,556)
Maturities of short-term investments	1,281	—	105,000
Sales of short-term investments	—	16,503	68,106
Change in restricted cash	(736)	(955)	—
Payments for business acquisitions	—	—	(2,934)
Acquisition of cash in noncontrolling interest	—	—	344
Investment in unconsolidated joint venture	—	—	(83)
Purchase of property, plant and equipment, net of disposals	(8,087)	(56,832)	(81,917)
Deposits on property, plant and equipment	—	(26)	(15,107)
Net cash provided by (used in) investing activities	(10,337)	(49,644)	5,853
Financing activities			
Proceeds from issuance of common stock, net of repurchases	309	891	8,445
Proceeds from issuance of common stock in private placements, net of issuance costs	19,980	84,682	—
Proceeds from equipment financing	—	—	3,000
Principal payments on capital leases	(1,366)	(3,727)	(2,835)
Proceeds from debt issued	10,535	78,904	37,957
Proceeds from debt issued to related party	65,000	30,000	—
Principal payments on debt	(3,277)	(52,633)	(5,018)
Payments of offering costs in initial public offering	—	—	(497)
Net cash provided by financing activities	91,181	138,117	41,052
Effect of exchange rate changes on cash and cash equivalents	1,291	(2,712)	(1,766)
Net decrease in cash and cash equivalents	(23,724)	(65,111)	(47,357)
Cash and cash equivalents at beginning of period	30,592	95,703	143,060
Cash and cash equivalents at end of period	$ 6,868	$ 30,592	$ 95,703

Amyris, Inc.

Consolidated Statements of Cash Flows — (Continued)
(In Thousands)

	Years Ended December 31, 2013	2012	2011
Supplemental disclosures of cash flow information:			
Cash paid for interest	$ 2,978	$ 3,399	$ 1,412
Cash paid for income taxes, net of refunds	$ —	$ —	$ —
Supplemental disclosures of noncash investing and financing activities:			
Acquisitions of property, plant and equipment under accounts payable, accrued liabilities and notes payable	$ 2,261	$ 2,538	$ 3,177
Financing of equipment	$ —	$ —	$ 3,420
Warrants issued in connection with equipment financing	$ —	$ —	$ 193
Warrants issued in connection with issuance of convertible promissory notes	$ 1,330	$ —	$ —
Financing of insurance premium under notes payable	$ 425	$ —	$ —
Receivable of proceeds for options exercised	$ 355	$ —	$ —
Capitalized taxes in property, plant and equipment	$ (8,572)	$ —	$ —
Debt issued related to an investment in joint venture	$ 68	$ —	$ —
Change in unrealized gain (loss) on investments	$ —	$ —	$ (5)
Asset retirement obligation	$ —	$ —	$ 174
Issuance of common stock upon exercise of warrants	$ —	$ —	$ 3,554
Issuance of common stock related to business acquisition	$ —	$ —	$ 7,000
Conversion of other liability to related party debt	$ —	$ (23,300)	$ —
Conversion of related party debt to common stock	$ —	$ 5,000	$ —
Transfer of property, plant and equipment to current assets	$ —	$ —	$ 886
Transfer of long term deposits to property, plant and equipment	$ —	$ 12,218	$ 50
Acquisition of net assets in noncontrolling interest	$ —	$ —	$ 25

See the accompanying notes to the consolidated financial statements.

1. The Company

Amyris, Inc. (the "Company") was incorporated in California on July 17, 2003 and reincorporated in Delaware on June 10, 2010 for the purpose of leveraging breakthroughs in synthetic biology to develop and provide renewable compounds for a variety of markets. The Company is currently building and applying its industrial synthetic biology platform to provide alternatives to select petroleum-sourced products used in specialty chemical and transportation fuel markets worldwide. The Company's first commercialization efforts have been focused on a renewable hydrocarbon molecule called farnesene (Biofene®), which forms the basis for a wide range of products varying from specialty chemical applications to transportation fuels, such as diesel. While the Company's platform is able to use a wide variety of feedstocks, the Company is focused initially on Brazilian sugarcane. In addition, the Company has entered into various contract manufacturing agreements to support commercial production. The Company has established two principal operating subsidiaries, Amyris Brasil Ltda. (formerly Amyris Brasil S.A., or Amyris Brasil) for production in Brazil, and Amyris Fuels, LLC (or Amyris Fuels). Nearly all of the Company's revenues through 2012 came from the sale of ethanol and reformulated ethanol-blended gasoline with substantially all of the remaining revenues coming from collaborations, government grants and sales of renewable products. In the third quarter of 2012, the Company transitioned out of the ethanol and reformulated ethanol-blended gasoline business. The Company does not expect to be able to replace much of the revenue lost in the near term as a result of this transition, while it continues its efforts to establish a renewable products business.

The Company's renewable products business strategy is to focus on direct commercialization of specialty products while moving established commodity products into joint venture arrangements with leading industry partners. To commercialize its products, the Company must be successful in using its technology to manufacture its products at commercial scale and on an economically viable basis (i.e., low per unit production costs). The Company is building its experience producing renewable products at commercial scale. The Company's prospects are subject to risks, expenses and uncertainties frequently encountered by companies in this stage of development.

The Company expects to fund its operations for the foreseeable future with cash and investments currently on hand, with cash inflows from collaboration and grant funding, cash contributions from product sales, and with new debt and equity financings. The Company's planned 2014 and 2015 working capital needs and its planned operating and capital expenditures are dependent on significant inflows of cash from existing collaboration partners and from funds under an existing convertible debt facility, as well as additional funding from new collaborations, and may also require additional funding from debt or equity financings. The Company will continue to need to fund its research and development and related activities and to provide working capital to fund production, storage, distribution and other aspects of its business. The Company's operating plan contemplates capital expenditures of approximately $9.0 million in 2014 and the Company expects to continue to incur costs in connection with its existing contract manufacturing arrangements.

Liquidity

The Company has incurred significant losses since its inception and believes that it will continue to incur losses and negative cash flow from operations into at least 2014. As of December 31, 2013, the Company had an accumulated deficit of $821.4 million and had cash, cash equivalents and short term investments of $8.3 million. The Company has significant outstanding debt and contractual obligations related to purchase commitments, as well as capital and operating leases. As of December 31, 2013, the Company's debt, net of discount of $27.9 million, totaled $152.1 million, of which $6.4 million matures within the next twelve months. In addition, the Company's debt agreements contain various covenants, including restrictions on the Company's business that could cause the Company to be at risk of defaults. Please refer to Note 5, "Debt" and Note 6, "Commitments and Contingencies" for further details regarding the Company's obligations and commitments.

The Company's operating plan for 2014 contemplates significant reduction in the Company's net cash outflows, resulting from (i) revenue growth from sales of existing and new products with positive gross margins, (ii) reduced production costs compared to prior periods as a result of manufacturing and technical developments in 2013, (iii) cash inflows from collaborations consistent with levels achieved in 2013 and (iv) operating expenses maintained at reduced levels.

In addition to cash contributions from product sales and debt and equity financings, the Company also depends on collaboration funding to support its operating expenses. While part of this funding is committed based on existing collaboration agreements, the Company will need to identify and obtain funding under additional collaborations that are not yet subject to any definitive agreement or are not yet identified. In addition, some of the Company's existing collaboration funding is subject to achievement by the Company of milestones or other funding conditions.

If the Company cannot secure sufficient collaboration funding to support its operating expenses in excess of cash contributions from product sales and existing debt and equity financings, it may need to issue additional preferred and/or discounted equity, agree to onerous covenants, grant further security interest in its assets, enter into collaboration and licensing arrangements that require it to relinquish commercial rights, or grant licenses on terms that are not favorable. If the Company fails to secure such funding, the Company could be forced to curtail its operations, which would have a material adverse effect on the Company's ability to continue with its business plans, and the Company's status as a going concern.

If the Company is unable to raise additional financing, or if other expected sources of funding are delayed or not received, the Company would take the following actions as early as the second quarter of 2014 to support its liquidity needs through the remainder of 2014 and into 2015:

- Effect significant headcount reductions in the United States and in Brazil, particularly with respect to both general and administrative employees and other employees not connected to critical or contracted activities.
- Shift its focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.
- Reduce its expenditures for third party contractors, including consultants, professional advisors and other vendors.
- Suspend operations at its pilot plants and demonstration facilities.
- Reduce or delay uncommitted capital expenditures, including non-essential lab equipment and information technology projects.

The contingency cash plan contemplating these actions is designed to save the Company an estimated $25.0 million to $35.0 million over the next twelve months. Implementing this plan could have a material negative impact on the Company's ability to continue its business as currently contemplated, including, without limitation, delays or failures in its ability to:

- Achieve planned production levels;
- Develop and commercialize products within planned timelines or at planned scales; and
- Continue other core activities.

Furthermore, any inability to scale-back operations as necessary, and any unexpected liquidity needs, could create pressure to implement more severe measures. Such measures could have a material adverse effect on the Company's ability to meet contractual requirements, including obligations to maintain manufacturing operations, and increase the severity of the consequences described above.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America ("GAAP") and with the instructions for Form 10-K and Regulations S-X. The consolidated financial statements include the accounts of the Company and its consolidated subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Principles of Consolidations

The Company has interests in joint venture entities that are variable interest entities ("VIEs"). Determining whether to consolidate a variable interest entity requires judgment in assessing (i) whether an entity is a VIE and (ii) if the Company is the entity's primary beneficiary and thus required to consolidate the entity. To determine if the Company is the primary beneficiary of a VIE, the Company evaluates whether it has (i) the power to direct the activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. The Company's evaluation includes identification of significant activities and an assessment of its ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding and financing and other applicable agreements and circumstances. The Company's assessment of whether it is the primary beneficiary of its VIEs requires significant assumptions and judgment.

The consolidated financial statements of the Company include the accounts of Amyris, Inc., its subsidiaries and two consolidated VIEs with respect to which the Company is considered the primary beneficiary, after elimination of intercompany accounts and transactions. Disclosure regarding the Company's participation in the VIEs is included in Note 7, "Joint Venture and Noncontrolling Interest."

Use of Estimates

In preparing the consolidated financial statements, management must make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash and cash equivalents, short term investments and accounts receivable. The Company places its cash equivalents and investments with high credit quality financial institutions and, by policy, limits the amount of credit exposure with any one financial institution. Deposits held with banks may exceed the amount of insurance provided on such deposits. The Company has not experienced any losses on its deposits of cash and cash equivalents and short-term investments.

The Company performs ongoing credit evaluation of its customers, does not require collateral, and maintains allowances for potential credit losses on customer accounts when deemed necessary.

Customers representing 10% or greater of accounts receivable were as follows:

	December 31,	
Customers	**2013**	**2012**
Customer B	27%	*
Customer C	14%	44%
Customer D	*	22%
Customer E	**	14%
Customer F	27%	*

* *No outstanding balance*

** *Less than 10%*

Customers representing 10% or greater of revenues were as follows:

Customers	Years Ended December 31, 2013	2012	2011
Customer A	*	13%	11%
Customer B	15%	*	*
Customer C	10%	**	**
Customer E	20%	**	**
Customer F	12%	**	*
Customer G	*	**	14%
Customer H	**	13%	*

* *Not a customer*
** *Less than 10%*

Fair Value of Financial Instruments

The Company measures certain financial assets and liabilities at fair value based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Where available, fair value is based on or derived from observable market prices or other observable inputs. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

The carrying amounts of certain financial instruments, such as cash equivalents, short term investments, accounts receivable, accounts payable and accrued liabilities, approximate fair value due to their relatively short maturities. The fair values of the notes payable, loan payable, convertible notes and credit facility are based on the present value of expected future cash flows and assumptions about current interest rates and the creditworthiness of the Company.

The Company estimate the fair value of the compound embedded derivatives for the convertible promissory notes to Total (refer to Note 5, "Debt" for further details) using the Monte Carlo simulation valuation model that combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of the Company's common stock into which the notes are convertible.

The Company estimates the fair value of the compound embedded derivative for the Tranche I Notes using the binomial lattice model in order to estimate the fair value of the embedded derivative in the Tranche I convertible notes. A binomial lattice model generates two probable outcomes — one up and another down — arising at each point in time, starting from the date of valuation until the maturity date. A lattice model was initially used to determine if the convertible notes would be converted, called or held at each decision point. Within the lattice model, the following assumptions are made: (i) the convertible notes will be converted early if the conversion value is greater than the holding value; or (ii) the convertible notes will be called if the holding value is greater than both (a) redemption price and (b) the conversion value at the time. If the convertible notes are called, then the holder will maximize their value by finding the optimal decision between (1) redeeming at the redemption price and (2) converting the convertible notes. Using this lattice method, the Company fair valued the embedded derivatives using the "with-and-without method", where the fair value of the convertible notes including the embedded derivatives is defined as the "with", and the value of the convertible notes excluding the embedded derivatives is defined as the "without". This method estimates the fair value of the embedded derivative by looking at the difference in the fair values between the convertible notes with the embedded derivative and the fair value of the convertible notes without the embedded derivative. The lattice model uses the stock price, conversion rate, conversion price, maturity date, risk-free interest rate, estimated stock volatility and estimated credit spread.

Changes in the inputs into these valuation models have a significant impact in the estimated fair value of the embedded derivatives. For example, a decrease (increase) in the estimated credit spread for the

Company results in an increase (decrease) in the estimated fair value of the embedded derivatives. Conversely, a decrease (increase) in the stock price results in a decrease (increase) in the estimated fair value of the embedded derivatives. The changes during 2013 in the fair value of the bifurcated compound embedded derivative is primarily related to the change in price of the Company's underlying common stock and is reflected in the consolidated statements of operations as "Income (loss) from change in fair value of derivative instruments."

Cash and Cash Equivalents

All highly liquid investments purchased with an original maturity date of 90 days or less at the date of purchase are considered to be cash equivalents. Cash and cash equivalents consist of money market funds and certificates of deposit.

Accounts Receivable

The Company maintains an allowance for doubtful accounts receivable for estimated losses resulting from the inability of its customers to make required payments. The Company determines this allowance based on specific doubtful account identification and management judgment on estimated exposure. The Company writes off accounts receivable against the allowance when it determines a balance is uncollectible and no longer actively pursues collection of the receivable.

Investments

Investments with original maturities greater than 90 days that mature less than 1 year from the consolidated balance sheet date are classified as short-term investments. The Company classifies investments as short-term or long-term based upon whether such assets are reasonably expected to be realized in cash or sold or consumed during the normal cycle of business. The Company invests its excess cash balances primarily in certificates of deposit. Certificates of deposits that have maturities greater than 90 days that mature less than one year from the consolidated balance sheet date are classified as short term investments. The Company classifies all of its investments as available-for-sale and records such assets at estimated fair value in the consolidated balance sheets, with unrealized gains and losses, if any, reported as a component of accumulated other comprehensive income (loss) in stockholders' equity (deficit). Debt securities are adjusted for amortization of premiums and accretion of discounts and such amortization and accretion are reported as a component of interest income. Realized gains and losses and declines in value that are considered to be other-than-temporary are recognized in the statements of operations. The cost of securities sold is determined on the specific identification method. There were no significant realized gains or losses from sales of debt securities during the years ended December 31, 2013, 2012 and 2011. As of December 31, 2013 and 2012, the Company did not have any other-than-temporary declines in the fair value of its debt securities.

Restricted Cash

Cash accounts that are restricted to withdrawal or usage are presented as restricted cash. As of December 31, 2013 and 2012, the Company had \$1.6 million and \$1.0 million, respectively, of restricted cash held by a bank in a certificate of deposit as collateral under a facility lease and bank guarantees.

Inventories

Inventories, which consist of farnesene-derived products, as well as ethanol and reformulated ethanol-blended gasoline, are stated at the lower of cost or market and categorized as finished goods, work-in-process or raw material inventories. During the quarter ended September 30, 2012, the Company sold its remaining inventory of ethanol and reformulated ethanol-blended gasoline as it transitioned out of this business. The Company evaluates the recoverability of its inventories based on assumptions about expected demand and net realizable value. If the Company determines that the cost of inventories exceeds its estimated net realizable value, the Company records a write-down equal to the difference between the cost of inventories and the estimated net realizable value. If actual net realizable values are less favorable than those projected by management, additional inventory write-downs may be required that could negatively impact the Company's operating results. If actual net realizable values are more favorable, the

Company may have favorable operating results when products that have been previously written down are sold in the normal course of business. The Company also evaluates the terms of its agreements with its suppliers and establishes accruals for estimated losses on adverse purchase commitments as necessary, applying the same lower of cost or market approach that is used to value inventory. Cost is computed on a first-in, first-out basis. Inventory costs include transportation costs incurred in bringing the inventory to its existing location.

Derivative Instruments

The Company makes limited use of derivative instruments, which includes currency interest rate swap agreements to manage the Company's exposure to foreign currency exchange rate fluctuations and interest rate fluctuations related to the Company's Banco Pine S.A. loan (discussed below under Note 5, "Debt"). Through the third quarter of 2012, the Company held futures positions on the New York Mercantile Exchange and the CME/Chicago Board of Trade to mitigate the risks related to the price volatility of ethanol and reformulated ethanol-blended gasoline but, as of September 30, 2012, the Company had transitioned out of that business and no longer held such derivative instruments. The Company does not engage in speculative derivative activities, and the purpose of its activity in derivative commodity instruments is to manage the financial risk posed by physical transactions and inventory. Changes in the fair value of the derivative contracts are recognized immediately in the consolidated statements of operations.

Embedded Derivatives Related to Convertible Notes

Embedded derivatives that are required to be bifurcated from the underlying debt instrument (i.e. host) are accounted for and valued as a separate financial instrument. The Company evaluated the terms and features of the convertible notes payable and identified compound embedded derivatives (a conversion option that contains a "make-whole interest" provision and down round conversion price adjustment provisions) requiring bifurcation and accounting at fair value because the economic and contractual characteristics of the embedded derivatives met the criteria for bifurcation and separate accounting due to the conversion option containing a "make-whole interest" provision, that requires cash payment for forgone interest upon a change of control and down round conversion price adjustment provisions.

Asset Retirement Obligations

The fair value of an asset retirement obligation is recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. In addition, asset retirement cost is added to the carrying amount of the associated asset and this additional carrying amount is amortized over the life of the asset. The Company's asset retirement obligations were associated with its commitment to return property subject to an operating lease in Brazil to its original condition upon lease termination. In October 2012, this operating lease was amended which included an amendment to the terms of restitution of the property under lease. As a result of this amendment, the Company no longer has asset retirement obligations and therefore reversed the previously accrued liabilities.

As of December 31, 2013 and 2012, the Company had no asset retirement obligations. The related leasehold improvements are being amortized to depreciation expense over the term of the lease or the useful life of the assets, whichever is shorter. Related amortization expense was zero, \$0.2 million, and \$0.2 million for the years ended December 31, 2013, 2012 and 2011, respectively.

The change in the asset retirement obligation is summarized below (in thousands):

Balance at December 31, 2010	$	984
Additions		166
Foreign currency impacts and other adjustments		(133)
Accretion expenses recorded during the period		112
Balance at December 31, 2011	$	1,129
Additions		—
Foreign currency impacts and other adjustments		(98)
Accretion expenses recorded during the period		91
Reversals		(1,122)
Balance at December 31, 2012	$	—

Property, Plant and Equipment, net

Property, plant and equipment, net are stated at cost less accumulated depreciation and amortization. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the related assets. Maintenance and repairs are charged to expense as incurred, and improvements and betterments are capitalized. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in operations in the period realized.

Depreciation and amortization periods for the Company's property, plant and equipment are as follows:

Machinery and equipment	7 – 15 years
Buildings	15 years
Computers and software	3 – 5 years
Furniture and office equipment	5 years
Vehicles	5 years

Buildings and leasehold improvements are amortized on a straight-line basis over the terms of the lease, or the useful life of the assets, whichever is shorter.

Computers and software includes internal-use software that is acquired to meet the Company's needs. Amortization commences when the software is ready for its intended use and the amortization period is the estimated useful life of the software, generally 3 to 5 years. Capitalized costs primarily include contract labor and payroll costs of the individuals dedicated to the installation of internal-use software.

Impairment of Long-Lived Assets

Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable or the estimated useful life is no longer appropriate. If indicators of impairment exist and the undiscounted projected cash flows associated with such assets are less than the carrying amount of the asset, an impairment loss is recorded to write the asset down to their estimated fair values. Fair value is estimated based on discounted future cash flows. There were $7.7 million, $6.4 million and zero, respectively, of impairment charges recorded during the years ended December 31, 2013, 2012 and 2011, respectively.

Goodwill and Intangible Assets

Goodwill represents the excess of the cost over the fair value of net assets acquired from business combinations. Intangible assets are comprised primarily of in-process research and development (or IPR&D). The Company makes significant judgments in relation to the valuation of goodwill and intangible assets resulting from business combinations.

There are several methods that can be used to determine the estimated fair value of the IPR&D acquired in a business combination. We used the "income method," which applies a probability weighting that considers the risk of development and commercialization, to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, pricing of similar products, and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written off, as appropriate.

Goodwill and intangible assets with indefinite lives are assessed for impairment using fair value measurement techniques on an annual basis or more frequently if facts and circumstance warrant such a review. When required, a comparison of fair value to the carrying amount of assets is performed to determine the amount of any impairment.

The Company evaluates its intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased licenses and permits and are amortized on a straight-line basis over their estimated useful lives. Amortization of intangible assets was zero, $0.4 million and $0.4 million for the years ended December 31, 2013, 2012 and 2011, respectively. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of use of the acquired assets or the strategy for the Company's overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, we reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on the Company's reported financial results. The Company has not recognized any impairment charges on its intangible assets through December 31, 2013.

In-Process Research and Development

During 2011, the Company recorded IPR&D of $8.6 million related to the acquisition of Draths. Amounts recorded as IPR&D will begin being amortized upon first sales of the product over the estimated useful life of the technology. In accordance with authoritative guidance, as the technology has not yet been proven, the amortization of the acquired IPR&D has not begun. The Company estimates that it could take up to three years before it will have viable products resulting from the acquired technology.

Noncontrolling Interest

Changes in noncontrolling interest ownership that do not result in a change of control and where there is a difference between fair value and carrying value are accounted for as equity transactions. In April 2010, the Company entered into a joint venture with São Martinho S.A. (or SMSA), a legal successor by spin-off of Usina São Martinho S.A. The carrying value of the noncontrolling interest from this joint venture is recorded in the equity section of the consolidated balance sheets (see Note 7, "Joint Venture and Noncontrolling Interest"). In January 2011, the Company entered into a production service agreement with Glycotech, Inc. (or Glycotech). The Company has determined that the arrangement with Glycotech qualifies as a VIE. The Company determined that it is the primary beneficiary. The carrying value of the noncontrolling interest from this VIE is recorded in the equity section of the consolidated balance sheets (see Note 7, "Joint Venture and Noncontrolling Interest").

Revenue Recognition

The Company recognizes revenue from the sale of farnesene-derived products, delivery of research and development services, and from governmental grants. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the fee is fixed or determinable, and collectibility is reasonably assured.

If sales arrangements contain multiple elements, the Company evaluates whether the components of each arrangement represent separate units of accounting.

Product Sales

Beginning in the second quarter of 2011, the Company began to sell farnesene-derived products, which were produced by contracted third parties. Through the third quarter of 2012, the Company also sold ethanol and reformulated ethanol-blended gasoline under short-term agreements at prevailing market prices. As of September 30, 2012, the Company had transitioned out of that business. Ethanol and reformulated ethanol-blended gasoline sales consisted of sales to customers through purchases from third-party suppliers in which the Company took physical control of the ethanol and reformulated ethanol-blended gasoline and accepted risk of loss. The Company's renewable product sales do not include rights of return. Returns are only accepted if the product does not meet product specifications and such nonconformity is communicated to the Company within a set number of days of delivery. The Company offers a two year standard warranty provision for squalane products sold after March 31, 2012, if the products do not meet Company-established criteria as set forth in the Company's trade terms. The Company bases its return reserve on a combination of historical rate of return for the Company's squalane products and historical returns for companies in the cosmetics industry since the Company did not have a full two years of historical return data. Revenues are recognized, net of discounts and allowances, once passage of title and risk of loss has occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met.

Grants and Collaborative Revenue

Revenue from collaborative research services is recognized as the services are performed consistent with the performance requirements of the contract. In cases where the planned levels of research services fluctuate over the research term, the Company recognizes revenue using the proportionate performance method based upon actual efforts to date relative to the amount of expected effort to be incurred by the Company. When up-front payments are received and the planned levels of research services do not fluctuate over the research term, revenue is recorded on a ratable basis over the arrangement term, up to the amount of cash received. When up-front payments are received and the planned levels of research services fluctuate over the research term, revenue is recorded using the proportionate performance method, up to the amount of cash received. Where arrangements include milestones that are determined to be substantive and at risk at the inception of the arrangement, revenue is recognized upon achievement of the milestone and is limited to those amounts whereby collectibility is reasonably assured.

Government grants are agreements that generally provide cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and only perfunctory obligations are outstanding. Under the Defense Advanced Research Projects Agency (or DARPA) contract signed in June 2012, the Company received funding based on achievement of program milestones. Accordingly, the Company recognized revenue using the proportionate performance method based upon actual efforts to date relative to the amount of expected effort to be incurred, up to the amount of verified payable milestones.

Cost of Products Sold

Cost of products sold includes production costs of farnesene-derived products, which include cost of raw materials, amounts paid to contract manufacturers and period costs including inventory write-downs resulting from applying lower-of-cost-or-market inventory valuation. Cost of farnesene-derived products sold also includes certain costs related to the scale-up in production of such products. Through the third quarter of 2012, cost of products sold consisted primarily of cost of purchased ethanol and reformulated ethanol-blended gasoline, terminal fees paid for storage and handling, transportation costs between terminals and changes in the fair value of derivative commodity instruments. The Company transitioned out of its ethanol and gasoline business in the quarter ended September 30, 2012.

Shipping and handling costs charged to customers are recorded as revenues. Shipping costs are included in cost of products sold. Such charges were not significant in any of the periods presented.

Costs of Start-Up Activities

Start-up activities are defined as those one-time activities related to opening a new facility, introducing a new product or service, conducting business in a new territory, conducting business with a new class of customer or beneficiary, initiating a new process in an existing facility, commencing some new operation or activities related to organizing a new entity. All the costs associated with start-up activities related to a potential facility are expensed and recorded within selling, general and administrative expenses until the facility is considered viable by management, at which time costs would be considered for capitalization based on authoritative accounting literature.

Research and Development

Research and development costs are expensed as incurred and include costs associated with research performed pursuant to collaborative agreements and government grants. Research and development costs consist of direct and indirect internal costs related to specific projects as well as fees paid to others that conduct certain research activities on the Company's behalf.

Debt Extinguishment

The Company accounts for the income or loss from extinguishment of debt in accordance with ASC 470, "Debt", which indicates that for all extinguishment of debt, the difference between the reacquisition price and the net carrying amount of the debt being extinguished should be recognized as gain or loss when the debt is extinguished. The gain or loss from debt extinguishment is recorded in the consolidated statements of operations under "other income (expense)" as "income (loss) from extinguishment of debt".

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires, among other things, that deferred income taxes be provided for temporary differences between the tax basis of the Company's assets and liabilities and their financial statement reported amounts. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carryforwards. A valuation allowance is provided against deferred tax assets unless it is more likely than not that they will be realized.

The Company recognizes and measures uncertain tax positions in accordance with Income Taxes subtopic 05-6 of ASC 740, which prescribes a recognition threshold and measurement process for recording uncertain tax positions taken, or expected to be taken in a tax return, in the consolidated financial statements. Additionally, the guidance also prescribes treatment for the derecognition, classification, accounting in interim periods and disclosure requirements for uncertain tax positions. The Company accrues for the estimated amount of taxes for uncertain tax positions if it is more likely than not that the Company would be required to pay such additional taxes. An uncertain tax position will not be recognized if it has a less than 50% likelihood of being sustained.

Currency Translation

The Company consider the local currency to be the functional currency of the Company's wholly-owned subsidiary in Brazil and of the Company's joint venture. Accordingly, asset and liability accounts of those operations are translated into United States dollars using the current exchange rate in effect at the balance sheet date and equity accounts are translated into United States dollars using historical rates. The revenues and expenses are translated using the exchange rates in effect when the transactions occur. Gains and losses from foreign currency translation adjustments are included as a component of accumulated other comprehensive income (loss) in the consolidated balance sheets.

Stock-Based Compensation

The Company accounts for stock-based compensation arrangements with employees using a fair value method which requires the recognition of compensation expense for costs related to all stock-based payments including stock options. The fair value method requires the Company to estimate the fair value of stock-based payment awards on the date of grant using an option pricing model. The Company uses the Black-Scholes option pricing model to estimate the fair value of options granted, which is expensed on a straight-line basis over the vesting period. The Company accounts for restricted stock unit awards issued to employees based on the fair market value of the Company's common stock.

The Company accounts for stock options issued to nonemployees based on the estimated fair value of the awards using the Black-Scholes option pricing model. The Company accounts for restricted stock units issued to nonemployees based on the fair market value of the Company's common stock. The measurement of stock-based compensation is subject to periodic adjustments as the underlying equity instruments vest, and the resulting change in value, if any, is recognized in the Company's consolidated statements of operations during the period the related services are rendered.

Comprehensive Income (Loss)

Comprehensive income (loss) represents all changes in stockholders' equity (deficit) except those resulting from investments or contributions by stockholders. The Company's foreign currency translation adjustments represent the components of comprehensive income (loss) excluded from the Company's net loss and have been disclosed in the consolidated statements of comprehensive loss for all periods presented.

The components of accumulated other comprehensive loss are as follows (in thousands):

	December 31,	
	2013	2012
Foreign currency translation adjustment, net of tax	$ (20,087)	$ (12,807)
Total accumulated other comprehensive loss	$ (20,087)	$ (12,807)

Net Loss Attributable to Common Stockholders and Net Loss per Share

The Company computes net loss per share in accordance with ASC 260, "Earnings per Share." Basic net loss per share of common stock is computed by dividing the Company's net loss attributable to Amyris, Inc. common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share of common stock is computed by giving effect to all potentially dilutive securities, including stock options, restricted stock units, common stock warrants, using the treasury stock method or the as converted method, as applicable. For all periods presented, basic net loss per share was the same as diluted net loss per share because the inclusion of all potentially dilutive securities outstanding was anti-dilutive. As such, the numerator and the denominator used in computing both basic and diluted net loss are the same for each period presented.

The following table presents the calculation of basic and diluted net loss per share of common stock attributable to Amyris, Inc. common stockholders (in thousands, except share and per share amounts):

	Years Ended December 31,		
	2013	2012	2011
Numerator:			
Net loss attributable to Amyris, Inc. common stockholders	$ (235,111)	$ (205,139)	$ (178,870)
Denominator:			
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic and diluted	75,472,770	56,717,869	44,799,056
Net loss per share attributable to common stockholders, basic and diluted	$ (3.12)	$ (3.62)	$ (3.99)

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share of common stock for the periods presented because including them would have been anti-dilutive:

	Years Ended December 31,		
	2013	2012	2011
Period-end stock options to purchase common stock	8,409,605	8,946,592	8,377,016
Convertible promissory notes[(1)]	42,905,005	10,370,391	—
Period-end common stock subject to repurchase	—	51	7,929
Period-end common stock warrants	1,021,087	21,087	26,223
Period-end restricted stock units	2,316,437	2,550,799	375,189
Total	54,652,134	21,888,920	8,786,357

(1) The potentially dilutive effect of convertible promissory notes were computed based on conversion ratios in effect as of December 31, 2013. A portion of the convertible promissory notes issued carries a provision for a reduction in conversion price if certain condition fails to occur, which could potentially increase the dilutive shares outstanding.

Recent Accounting Pronouncements

In December 2011, the International Accounting Standards Board and the FASB issued common disclosure requirements that are intended to enhance comparability between financial statements prepared on the basis of GAAP and those prepared in accordance with International Financial Reporting Standards. In January 2013, the FASB issued an accounting standard update to limit the scope of the new balance sheet offsetting disclosures to derivative instruments, repurchase agreements, and securities lending transactions to the extent that they are offset in the financial statement or subject to an enforceable master netting arrangement or similar arrangement. While this guidance does not change existing offsetting criteria in GAAP or the permitted balance sheet presentation for items meeting the criteria, it requires an entity to disclose both net and gross information about assets and liabilities that have been offset and the related arrangements. Required disclosures under this new guidance should be provided retrospectively for all comparative periods presented. This new guidance is effective for fiscal years beginning on or after January 1, 2013, and interim periods within those years. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In July 2012, the FASB issued an amended accounting standard update to simplify how entities test indefinite-lived intangible assets for impairment which improve consistency in impairment testing requirements among long-lived asset categories. The amended guidance permits an assessment of qualitative factors to determine whether it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying value. For assets in which this assessment concludes it is more likely than not that the fair value is more than its carrying value, then the amended guidance eliminates the requirement to perform quantitative impairment testing as outlined in the previously issued standards. The amended guidance is effective for fiscal years beginning after September 15, 2012 and early adoption was permitted. The adoption of the amended guidance did not have an impact on the Company's consolidated financial statements.

In February 2013, in connection with the accounting standard related to the presentation of the Statement of Comprehensive Income, the FASB issued an accounting standard update to improve the reporting of reclassifications out of accumulated other comprehensive income of various components. This guidance requires companies to present either parenthetically on the face of the financial statements or in the notes, significant amounts reclassified from each component of accumulated other comprehensive income and the income statement line items affected by the reclassification. This standard is effective for interim periods and fiscal years beginning after December 15, 2012. The adoption of this guidance did not have a material effect the Company's consolidated financial statements.

In July 2013, the FASB issued an amended accounting standard update on the financial statement presentation of unrecognized tax benefits. The amended guidance provides that a liability related to an unrecognized tax benefit would be presented as a reduction of a deferred tax asset for a net operating loss carryforward, a similar tax loss or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. The new guidance becomes effective for the Company on January 1, 2014 and will be applied prospectively to unrecognized tax benefits that exist at the effective date with retrospective applications permitted. The Company's current presentation of unrecognized tax benefits conforms with the amended guidance. Accordingly, there will be no impact to the Company resulting from the guidance.

3. Fair Value of Financial Instruments

The inputs to the valuation techniques used to measure fair value are classified into the following categories:

Level 1: Quoted market prices in active markets for identical assets or liabilities.

Level 2: Observable market-based inputs or unobservable inputs that are corroborated by market data.

Level 3: Unobservable inputs that are not corroborated by market data.

As of December 31, 2013, the Company's financial assets and financial liabilities are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	Balance as of December 31, 2013
Financial Assets				
Money market funds	$ 398	$ —	$ —	$ 398
Certificates of deposit	1,428	—	—	1,428
Total financial assets	$ 1,826	$ —	$ —	$ 1,826
Financial Liabilities				
Loans payable	$ —	$ 18,491	$ —	$ 18,491
Credit facilities	—	7,571	—	7,571
Convertible notes	—	—	131,952	131,952
Compound embedded derivative liability	—	—	131,117	131,117
Currency interest rate swap derivative liability	—	3,600	—	3,600
Total financial liabilities	$ —	$ 29,662	$ 263,069	$ 292,731

The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability. The fair values of money market funds are based on fair values of identical assets. The fair values of the loans payable, convertible notes, credit facilities and currency interest rate swaps are based on the present value of expected future cash flows and assumptions about current interest rates and the creditworthiness of the Company. Market risk associated with the fixed and variable rate long-term debt relates to the potential reduction in fair value and negative impact to future earnings, respectively, from an increase in interest rates.

The carrying amounts of certain financial instruments, such as cash equivalents, short term investments, accounts receivable, accounts payable, accrued liabilities and notes payable, approximate fair value due to their relatively short maturities, and low market interest rates, if applicable. The fair values of the loans payable, convertible notes and credit facilities are based on the present value of expected future cash flows and assumptions about current interest rates and the creditworthiness of the Company.

The Company's financial assets and financial liabilities as of December 31, 2012 are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	Balance as of December 31, 2012
Financial Assets				
Money market funds	$ 15,847	$ —	$ —	$ 15,847
Certificates of deposit	757	—	—	757
Total financial assets	16,604	$ —	$ —	$ 16,604
Financial Liabilities				
Notes payable	$ —	$ 1,676	$ —	$ 1,676
Loans payable	—	20,707	—	20,707
Credit facilities	—	11,503	—	11,503
Convertible notes	—	—	62,522	62,522
Compound embedded derivative liability	—	—	7,894	7,894
Currency interest rate swap derivative liability	—	1,367	—	1,367
Total financial liabilities	$ —	$ 35,253	$ 70,416	$ 105,669

The following table provides a reconciliation of the beginning and ending balances for the convertible notes measured at fair value using significant unobservable inputs (Level 3) (in thousands):

	2013	2012
Balance at January 1	$ 62,522	$ —
Additions to convertible notes	72,570	73,300
Change in fair value of convertible notes	(3,140)	(10,778)
Balance at December 31	$ 131,952	$ 62,522

Derivative Instruments

The following table provides a reconciliation of the beginning and ending balances for the compound embedded derivative liability measured at fair value using significant unobservable inputs (Level 3) (in thousands):

	2013	2012
Balance at January 1	$ 7,894	$ —
Transfers in to Level 3 net of cancellation(1)	40,901	11,025
Total (income) loss from change in fair value of derivative liability	82,322	(3,131)
Balance at December 31	$ 131,117	$ 7,894

(1) Includes $0.8 million removal of derivative liability related to debt extinguishment.

The compound embedded derivative liability, represents the fair value of the equity conversion option and a "make-whole" provision of outstanding Total and Tranche I convertible promissory notes (see Note 5, "Debt"). There is no current observable market for this type of derivative and, as such, the Company determined the fair value of the embedded derivative using a Monte Carlo simulation valuation model for the Total Notes and the binomial lattice model for the Tranche I Notes. A Monte Carlo simulation valuation model combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of the Company's common stock into which the notes are convertible. A binomial lattice model generates two probable outcomes — one up and another down — arising at each point in time, starting from the date of valuation until the maturity date. A lattice model was initially used to determine if the convertible notes would be converted, called or held at each decision point. Within the lattice model, the following assumptions are made: (i) the convertible notes will be converted early if the conversion value is greater than the holding value; or (ii) the convertible notes will be called if the holding value is greater than both (a) redemption price and (b) the conversion value at the time. If the convertible notes are called, then the holder will maximize their value by finding the optimal decision between (1) redeeming at the redemption price and (2) converting the convertible notes. Using this lattice method, the Company valued the embedded derivative using the "with-and-without method", where the fair value of the convertible notes including the embedded derivative is defined as the "with", and the fair value of the convertible notes excluding the embedded derivative is defined as the "without". This method estimates the fair value of the embedded derivative by looking at the difference in the values between the convertible notes with the embedded derivative and the fair value of the convertible notes without the embedded derivative. The lattice model uses the stock price, conversion price, maturity date, risk-free interest rate, estimated stock volatility and estimated credit spread. The Company marks the compound embedded derivative to market due to the conversion price not being indexed to the Company's own stock. Except for the "make-whole interest" provision included in the conversion option, which is only required to be settled in cash upon a change of control at the noteholder's option, the compound embedded derivative will be settled in either cash or shares. As of December 31, 2013, the Company has sufficient common stock available to settle the conversion option in shares.As of December 31, 2013 and 2012, included in Derivative Liability on the consolidated balance sheet is the Company's compound embedded derivative liability of $131.1 million and $7.9 million, respectively, which represents the fair value of the equity conversion option and a "make-whole" provision relating to the outstanding senior secured convertible promissory notes issued to Total as described above.

In June 2012, the Company entered into a loan agreement with Banco Pine S.A. (or Banco Pine) under which Banco Pine provided the Company with a short term loan (referred to as the Banco Pine Bridge Loan) (see Note 5, "Debt"). At the time of the Bridge Loan, the Company also entered into a currency interest rate swap arrangement with Banco Pine with respect to the repayment of R$22.0 million (approximately US$9.4 million based on the exchange rate as of December 31, 2013). The swap arrangement exchanges the principal and interest payments under the Banco Pine loan of R$22.0 million entered into in July 2012 for alternative principal and interest payments that are subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap has a fixed interest rate of 3.94%. Changes in the fair value of the swap are recognized in "Income (loss) from change in fair value of derivative instruments" in the consolidated statements of operations.

Derivative instruments measured at fair value as of December 31, 2013 and 2012, and their classification on the consolidated balance sheets and consolidated statements of operations, are presented in the following tables (in thousands except contract amounts):

	Liability as of			
	December 31, 2013		December 31, 2012	
Type of Derivative Contract	**Quantity of Short Contracts**	**Fair Value**	**Quantity of Short Contracts**	**Fair Value**
Currency interest rate swap, included as net liability in derivative liability	1	$ 3,600	1	$ 1,367

		Years Ended December 31,		
Type of Derivative Contract	**Income Statement Classification**	**2013**	**2012**	**2011**
		Gain (Loss) Recognized		
Regulated fixed price futures contracts	Cost of products sold	$ —	$ (288)	$ (2,365)
Currency interest rate swap . . .	Income (loss) from change in fair value of derivative instruments	$ (2,233)	$ (1,367)	$ —

4. Balance Sheet Components

Inventories, net

Inventories, net is comprised of the following (in thousands):

	December 31, 2013	December 31, 2012
Raw materials	$ 1,796	$ 1,574
Work-in-process	7,292	1,771
Finished goods	1,800	2,689
Inventories, net	$ 10,888	$ 6,034

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets is comprised of the following (in thousands):

	December 31, 2013	December 31, 2012
Advances to contract manufacturers	$ 7	$ 784
Manufacturing catalysts	1,536	1,895
Recoverable VAT and other taxes	5,125	4,167
Other	2,850	2,079
Prepaid expenses and other current assets	$ 9,518	$ 8,925

Property, Plant and Equipment, net

Property, plant and equipment, net is comprised of the following (in thousands):

	December 31, 2013	December 31, 2012
Leasehold improvements	$ 39,034	$ 39,290
Machinery and equipment	96,585	105,162
Computers and software	8,509	8,232
Furniture and office equipment	2,535	2,467
Buildings	7,148	5,888
Vehicles	488	575
Construction in progress	41,387	45,372
	$ 195,686	$ 206,986
Less: accumulated depreciation and amortization	(55,095)	(43,865)
Property, plant and equipment, net	$ 140,591	$ 163,121

The Company's first, purpose-built, large-scale Biofene production plant in southeastern Brazil commenced operations in December 2012. This plant is located at Brotas in the state of São Paulo, Brazil and is adjacent to an existing sugar and ethanol mill, Paraíso Bioenergia. The Company's construction in progress consists primarily of the upfront plant design and the initial construction of a second large-scale production plant in Brazil, located at the SMSA sugar and ethanol mill (also in the state of São Paulo, Brazil).

Property, plant and equipment, net includes $3.4 million and $9.1 million of machinery and equipment under capital leases as of December 31, 2013 and 2012, respectively. Accumulated amortization of assets under capital leases totaled $1.5 million and $4.1 million as of December 31, 2013 and 2012, respectively.

Depreciation and amortization expense, including amortization of assets under capital leases, was $16.6 million, $14.2 million and $10.7 million for the years ended December 31, 2013, 2012 and 2011, respectively.

The Company capitalizes interest costs incurred to construct plant and equipment. The capitalized interest is recorded as part of the depreciable cost of the asset to which it relates to and is amortized over the asset's estimated useful life. Interest cost capitalized as of December 31, 2013 and 2012 was $0.5 million and $0.6 million, respectively.

Other Assets

Other assets are comprised of the following (in thousands):

	December 31,	
	2013	2012
Deposits on property and equipment, including taxes	$ 1,970	$ 2,363
Advances to contract manufacturers, net of current portion[1]	—	2,222
Recoverable taxes from Brazilian government entities	6,599	13,597
Other	2,016	1,930
Total other assets	$ 10,585	$ 20,112

(1) At December 31, 2012, the amount of $2.2 million relates to the non-current unamortized portion of equipment costs funded by the Company to a contract manufacturer. The related amortization was offset against purchases of inventory during 2013.

Accrued and Other Current Liabilities

Accrued and other current liabilities are comprised of the following (in thousands):

	December 31,	
	2013	2012
Professional services	$ 2,279	$ 824
Accrued vacation	2,274	2,673
Payroll and related expenses	5,066	5,809
Tax-related liabilities	825	851
Deferred rent, current portion	1,111	1,448
Accrued interest[1]	3,176	965
Contractual obligations to contract manufacturers	4,241	9,952
Customer advances	—	970
Other[1]	2,249	918
Total accrued and other current liabilities	$ 21,221	$ 24,410

(1) Certain reclassifications of prior period amounts have been made to conform to the current period presentation. Such reclassifications did not materially change previously reported consolidated financial statements.

Derivative Liability

Derivative liability is comprised of the following (in thousands):

	December 31, 2013	December 31, 2012
Fair market value of swap obligations	$ 3,600	$ 1,367
Fair value of compound embedded derivative liability(1)	131,117	7,894
Total derivative liability	$ 134,717	$ 9,261

(1) The compound embedded derivative liability represents the fair value of the equity conversion features or "make-whole provision" features included in the outstanding Total and Tranche I convertible promissory notes (see Note 3, "Fair value of financial instruments" and Note 5, "Debt").

5. Debt

Debt is comprised of the following (in thousands):

	December 31, 2013	December 31, 2012
Credit facilities	$ 8,767	$ 12,409
Notes payable	—	1,572
Convertible notes	28,537	25,000
Related party convertible notes	89,499	39,033
Loans payable	25,259	26,150
Total debt	152,062	104,164
Less: current portion	(6,391)	(3,325)
Long-term debt	$ 145,671	$ 100,839

FINEP Credit Facility

In November 2010, the Company entered into the FINEP Credit Facility. This FINEP Credit Facility was extended to partially fund expenses related to the Company's research and development project on sugarcane-based biodiesel ("FINEP Project") and provided for loans of up to an aggregate principal amount of R$6.4 million (approximately US$2.7 million based on the exchange rate as of December 31, 2013) which is secured by a chattel mortgage on certain equipment of the Company as well as by bank letters of guarantee. All available credit under this facility was fully drawn.

Interest on loans drawn under the FINEP Credit Facility is fixed at 5% per annum. In case of default under or non-compliance with the terms of the agreement, the interest on loans will be dependent on the long-term interest rate as published by the Central Bank of Brazil (such rate, the "TJLP"). If the TJLP at the time of default is greater than 6%, then the interest will be 5% plus a TJLP adjustment factor, otherwise the interest will be at 11% per annum. In addition, a fine of up to 10% shall apply to the amount of any obligation in default. Interest on late balances will be 1% interest per month, levied on the overdue amount. Payment of the outstanding loan balance is being made in 81 monthly installments, which commenced in July 2012 and extends through March 2019. Interest on loans drawn and other charges are paid on a monthly basis and commenced in March 2011. As of December 31, 2013 and 2012, the total outstanding loan balance under this credit facility was R$5.2 million (approximately US$2.2 million based on the exchange rate as of December 31, 2013) and R$6.4 million (approximately US$3.1 million based on exchange rate as of December 31, 2012), respectively.

The FINEP Credit Facility contains the following significant terms and conditions:

- The Company was required to share with FINEP the costs associated with the FINEP Project. At a minimum, the Company was required to contribute from its own funds approximately R$14.5

million (approximately US$6.2 million based on the exchange rate as of December 31, 2013) of which R$11.1 million was contributed prior to the release of the second disbursement. All four disbursements were completed and the Company has fulfilled all of its cost sharing obligations;

- After the release of the first disbursement, prior to any subsequent drawdown from the FINEP Credit Facility, the Company was required to provide bank letters of guarantee of up to R$3.3 million in aggregate (approximately US$1.4 million based on the exchange rate as of December 31, 2013). On December 17, 2012 and prior to release of the second disbursement on December 26, 2012, the Company obtained the required bank letter of guarantees from Banco ABC Brasil S.A. (or ABC);

- Amounts disbursed under the FINEP Credit Facility were required to be used towards the FINEP Project within 30 months after the contract execution.

Revolving Credit Facility

In December 2010, the Company established a revolving credit facility with a financial institution that provided for loans and standby letters of credit of up to an aggregate principal amount of $10.0 million with a sublimit of $5.0 million on standby letters of credit. Interest on loans drawn under this revolving credit facility was equal to (i) the Eurodollar Rate plus 3.0%; or (ii) the Prime Rate plus 0.5%. In case of default or non-compliance with the terms of the agreement, the interest on loans was Prime Rate plus 2.0%. The credit facility was collateralized by a first priority security interest in certain of the Company's present and future assets. In April 2012, the Company repaid $7.7 million of its outstanding loans under the Credit Facility. In May 2012, the Company entered into a letter agreement with the bank amending the credit facility agreement to reduce the committed amount under the credit facility from $10.0 million to approximately $2.3 million, and the letters of credit sublimit from $5.0 million to approximately $2.3 million. The amendment also modified the current ratio covenant to require a ratio of current assets to current liabilities of at least $1.3:1 (as compared to 2:1 in the Credit Facility), and required the Company to maintain unrestricted cash of at least $15.0 million in its account with the Bank. In June 2012, the credit facility was terminated and, as of December 31, 2012, no loans or letters of credit were outstanding.

BNDES Credit Facility

In December 2011, the Company entered into the BNDES Credit Facility in the amount of R$22.4 million (approximately US$9.6 million based on the exchange rate as of December 31, 2013). This BNDES Credit Facility was extended as project financing for a production site in Brazil. The credit line is divided into an initial tranche for up to approximately R$19.1 million reais and an additional tranche of approximately R$3.3 million that becomes available upon delivery of additional guarantees. The credit line is available for 12 months from the date of the Credit Facility, subject to extension by the lender.

The principal of the loans under the BNDES Credit Facility is required to be repaid in 60 monthly installments, with the first installment due in January 2013 and the last due in December 2017. Interest will be due initially on a quarterly basis with the first installment due in March 2012. From and after January 2013, interest payments will be due on a monthly basis together with principal payments. The loaned amounts carry interest of 7% per annum. Additionally, there is a credit reserve charge of 0.1% on the unused balance from each credit installment from the day immediately after it is made available through its date of use, when it is paid.

The BNDES Credit Facility is collateralized by a first priority security interest in certain of the Company's equipment and other tangible assets totaling R$24.9 million (approximately US$10.6 million based on the exchange rate as of December 31, 2013). The Company is a parent guarantor for the payment of the outstanding balance under the BNDES Credit Facility. Additionally, the Company was required to provide a bank guarantee equal to 10% of the total approved amount (R$22.4 million in total debt) available under this Credit Facility. For advances of the second tranche (above R$19.1 million), the Company is required to provide additional bank guarantees equal to 90% of each such advance, plus additional Company guarantees equal to at least 130% of such advance. The BNDES Credit Facility contains customary events of default, including payment failures, failure to satisfy other obligations under this credit facility or related documents, defaults in respect of other indebtedness, bankruptcy, insolvency and inability to pay debts when due, material judgments, and changes in control of Amyris Brasil. If any event of default occurs, the Lender may terminate its commitments and declare immediately due all borrowings under the facility. As of December 31, 2013 and 2012, the Company had R$15.3 million (approximately US$6.5 million based on the exchange rate as of December 31, 2013) and R$19.1 million (approximately US$9.3 million based on the exchange rate as of December 31, 2012), respectively, in outstanding advances under the BNDES Credit Facility.

Notes Payable

During the period between May 2008 and October 2008, the Company entered into notes payable agreements with the lessor of its headquarters under which it borrowed a total of $3.3 million for the purchase of tenant improvements, bearing an interest rate of 9.5% per annum and to be repaid over a period of 55 to 120 months. As of December 31, 2013 and 2012, a principal amount of zero and $1.6 million, respectively, was outstanding under these notes payable. In June 2013, as part of the April 30, 2013 Amendment to the Company's operating lease for its headquarters, the Company recorded the elimination of these notes payable as a lease incentive and recorded approximately $1.4 million to deferred rent liability in the consolidated balance sheet. The deferred rent liability is being amortized to expense over the remaining lease term.

Convertible Notes

In February 2012, the Company completed the sale of senior unsecured convertible promissory notes in an aggregate principal amount of $25.0 million pursuant to a securities purchase agreement, between the Company and certain investment funds affiliated with Fidelity Investments Institutional Services Company, Inc. (referred to as the Fidelity Securities Purchase Agreement). The offering consisted of the sale of 3% senior unsecured convertible promissory notes with a March 1, 2017 maturity date and an initial conversion price equal to $7.0682 per share of the Company's common stock, subject to proportional adjustment for adjustments to outstanding common stock and anti-dilution provisions in case of dividends and distributions (referred to as the Fidelity Notes). As of December 31, 2013, the Fidelity Notes were convertible into an aggregate of up to 3,536,968 shares of the Company's common stock. The note holders have a right to require repayment of 101% of the principal amount of the Fidelity Notes in an acquisition of the Company, and the notes provide for payment of unpaid interest on conversion following such an acquisition if the note holders do not require such repayment. The Fidelity Securities Purchase Agreement and Fidelity Notes include covenants regarding payment of interest, maintaining the Company's listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The Fidelity Notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, material adverse effect clauses and breaches of the covenants in the Fidelity Securities Purchase Agreement and Fidelity Notes, with default interest rates and associated cure periods applicable to the covenant regarding SEC reporting. Furthermore, the Fidelity Notes include restrictions on the amount of debt the Company is permitted to incur. With exceptions for certain existing debt, refinancing of such debt and certain other exclusions and waivers, the Fidelity Notes provide that the Company's total outstanding debt at any time cannot exceed the greater of $200.0 million or 50% of its consolidated total assets and its secured debt cannot exceed the greater of $125.0 million or 30% of its consolidated total assets. In connection with the Company's closing of a short-term bridge loan for $35.0 million in October 2013, holders of the Fidelity Notes waived compliance with the debt limitations outlined above as to the $35.0 million bridge loan and the August 2013 Financing. In consideration for such waiver, the Company granted to holders of the Fidelity Notes or their affiliates, the right to purchase up to an aggregate of $7.6 million worth of convertible promissory notes in the first tranche of the August 2013 Financing.

In October 2013, the Company amended the August 2013 SPA (see Note 1, "The Company") to include the Fidelity Entities in the first tranche convertible promissory notes. Pursuant to the amendment agreement the Company sold senior convertible notes with an aggregate principal amount of $7.6 million to the Fidelity Entities. The Tranche I Notes are due sixty months from the date of issuance and will be convertible into the Company's common stock at a conversion price equal to $2.44, subject to adjustment as described below. The Tranche I Notes are convertible at the option of the holder: (i) at any time after 18 months from the date of the August 2013 SPA, (ii) on a change of control of the Company and (iii) upon the occurrence of an event of default. The conversion price of the Tranche I Notes will be reduced to $2.15 if a specified Company manufacturing plant fails to achieve a total production of 1.0 million liters within a run period of 45 days prior to June 30, 2014, the Company fails to achieve gross margins from product sales of at least 5% prior to June 30, 2014, or the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes. If either of the production and margin milestones occur, and in addition, the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes, the conversion price of the Tranche I Notes will be reduced to $1.87. Each Tranche I Note accrues interest from the date of issuance until the earlier of the date that such Tranche I Note is converted into the Company's common stock or is repaid in full. Interest accrues at a rate of 5% per six months, compounded semiannually (with graduated interest rates of 6.5% applicable to the first 180 days and 8% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at 6.5% for all other defaults). Interest for the first 30 months is payable in kind and added to the principal every six-months and thereafter, the Company may continue to pay interest in kind by adding to the principal every six-months or may elect to pay interest in cash. The Tranche I Notes may be prepaid by the Company after 30 months from the issuance date and initial interest payment; thereafter the Company has the option to prepay the Tranche I Notes every six months at the date of payment of the semi-annual coupon.

As of December 31, 2013 and 2012, principal amount of $32.6 million and $25.0 million, respectively, were outstanding under these convertible notes.

Related Party Convertible Notes

In July 2012, the Company entered into an agreement with Total that expanded Total's investment in the Biofene collaboration with the Company, provided new structure for a joint venture (referred to as the Fuels JV) to commercialize the products encompassed by the diesel and jet fuel research and development program (or, the Program), and established a convertible debt structure for the collaboration funding from Total (referred to as the July 2012 Agreements).

The purchase agreement for the notes related to the funding from Total (referred to as the Total Purchase Agreement) provides for the sale of an aggregate of $105.0 million in notes as follows:

- As part of an initial closing under the purchase agreement (which initial closing was completed in two installments), (i) on July 30, 2012, the Company sold a 1.5% Senior Unsecured Convertible Note due March 2017 to Total in the face amount of $38.3 million, including $15.0 million in new funds and $23.3 million in previously-provided diesel research and development funding by Total, and (ii) on September 14, 2012, the Company sold another note (in the same form) for $15.0 million in new funds from Total.

- At a second closing under the Total Purchase Agreement (also completed in two installments) the Company sold additional notes for an aggregate of $30.0 million in new funds from Total ($10.0 million in June 2013 and $20.0 million in July 2013).

- The Total Purchase Agreement provides that additional notes may be sold in subsequent closings in July 2014 (for cash proceeds to the Company of $21.7 million, which would be settled in an initial installment of $10.85 million payable at such closing and a second installment of $10.85 million payable in January 2015).

The notes issued have a maturity date of March 1, 2017, an initial conversion price equal to $7.0682 per share for the notes issued under the initial closing and an initial conversion price equal $3.08 per share for the notes issued under the second closing. The notes bear interest of 1.5% per annum (with a default rate of 2.5%), accruing from the date of funding and payable at maturity or on conversion or a change of control where Total exercises the right to require the Company to repay the notes. Accrued interest is cancelled if the notes are cancelled based on a "Go" decision (see Note 8, "Significant Agreements"). The agreements contemplate that the research and development efforts under the Program may extend through 2016, with a series of "Go/No Go" decisions (see Note 8, "Significant Agreements") by Total through such date tied to funding by Total.

The notes become convertible into the Company's common stock (i) within 10 trading days prior to maturity (if they are not cancelled as described above prior to their maturity date), (ii) on a change of control of the Company, (iii) if Total is no longer the largest stockholder of the Company following a "No-Go" decision (subject to a six-month lock-up with respect to any shares of common stock issued upon conversion), and (iv) on a default by the Company. If Total makes a final "Go" decision, then the notes will be exchanged by Total for equity interests in the Fuels JV, after which the notes will not be convertible and any obligation to pay principal or interest on the notes will be extinguished. If Total makes a "No-Go" decision, outstanding notes will remain outstanding and become payable at maturity.

In connection with the December 2012 private placement described below (see Note 10, "Stockholders Equity"), Total elected to participate in the private placement by exchanging approximately $5.0 million of its $53.3 million in senior unsecured convertible promissory notes into 1,677,852 of the Company's common stock at $2.98 per share. As such, $5.0 million of the outstanding $53.3 million in senior unsecured convertible promissory notes was cancelled. The cancellation of the debt was treated as an extinguishment of debt in accordance with the guidance outlined in ASC 470-50. As a result of the exchange and cancellation of the $5.0 million debt the Company recorded a loss from extinguishment of debt of $0.9 million.

In March 2013, the Company entered into a letter agreement with Total (referred to as the March 2013 Letter Agreement) under which Total agreed to waive its right to cease its participation in the parties' fuels collaboration at the July 2013 decision point and committed to proceed with the July 2013 funding tranche of $30.0 million (subject to the Company's satisfaction of the relevant closing conditions for such funding in the Total Purchase Agreement). As consideration for this waiver and commitment, the Company agreed to:

- Reduce the conversion price for the senior unsecured convertible promissory notes to be issued in connection with such funding from $7.0682 per share to a price per share equal to the greater of (i) the consolidated closing bid price of the Company's common stock on the date of the letter agreement, plus $0.01, and (ii) $3.08 per share, provided that the conversion price would not be reduced by more than the maximum possible amount permitted under the rules of NASDAQ such that the new conversion price would require the Company to obtain stockholder consent; and
- Grant Total a senior security interest in the Company's intellectual property, subject to certain exclusions and subject to release by Total when the Company and Total enter into final documentation regarding the establishment of the Fuels JV.

In addition to the waiver by Total described above, Total also agreed that, at the Company's request and contingent upon the Company meeting its obligations described above, it would pay advance installments of the amounts otherwise payable at the July 2013 closing. Specifically, if the Company requested such advance installments, subject to certain closing conditions and delivery of certifications regarding the Company's cash levels, Total was obligated to fund $10.0 million no later than May 15, 2013, and an additional $10.0 million no later than June 15, 2013, with the remainder to be funded on the original July 2013 closing date.

In June 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $10.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above. In accordance with the March 2013 Letter Agreement, this convertible note has an initial conversion price equal to $3.08 per share of the Company's common stock. The Company did not request the May advance of $10.0 million, but did request the June advance (as described above), under which this convertible note was issued.

In July 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $20.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above. This purchase and sale completed Total's commitment to purchase $30.0 million of such notes by July 2013. In accordance with the March 2013 Letter Agreement, this convertible note has an initial conversion price equal to $3.08 per share of Company common stock.

The conversion prices of the notes issued under the Total Purchase Agreement are subject to adjustment for proportional adjustments to outstanding common stock and under anti-dilution provisions in case of certain dividends and distributions. Total has a right to require repayment of 101% of the principal amount of the notes in the event of a change of control of the Company and the notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment. The purchase agreement and notes include covenants regarding payment of interest, maintenance of the Company's listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the purchase agreement and notes, with added default interest rates and associated cure periods applicable to the covenant regarding SEC reporting. Furthermore, the notes include restrictions on the amount of debt the Company is permitted to incur. With exceptions for certain existing debt, refinancing of such debt and certain other exclusions and waivers, the notes provide that the Company's total outstanding debt at any time cannot exceed the greater of $200.0 million or 50% of its consolidated total assets and its secured debt cannot exceed the greater of $125.0 million or 30% of its consolidated total assets. In connection with the Company's closing of a short-term bridge loan for $35.0 million in October 2013, Total waived compliance with the debt limitations outlined above as to the $35.0 million bridge loan and the August 2013 Financing.

In connection with the August 2013 Financing, the Company entered into the August 2013 SPA (see Note 1, "The Company") with Total and Temasek to sell up to $73.0 million in convertible promissory notes in private placements, with such notes to be sold and issued over a period of up to 24 months from the date of signing. The August 2013 SPA provided for the August 2013 Financing to be divided into two tranches (the first tranche for $42.6 million and the second tranche for $30.4 million), each with differing closing conditions. Of the total possible purchase price in the financing, $60.0 million to be paid in the form of cash by Temasek ($35.0 million in the first tranche and up to $25.0 million in the second tranche) and $13.0 million to be paid by the exchange and cancellation of outstanding convertible promissory notes held by Total in connection with its exercise of pro rata rights ($7.6 million in the first tranche and $5.4 million in the second tranche). The August 2013 SPA included requirements that the Company meet certain production milestones before the second tranche would become available, obtain stockholder approval prior to completing any closing of the transaction, and issue a warrant to Temasek to purchase 1,000,000 shares of the Company's common stock at an exercise price of $0.01 per share, exercisable only if Total converts preexisting promissory notes with a certain per share conversion price. In September 2013, the Company's stockholders approved the August 2013 Financing.

In September 2013, the Company entered into a bridge loan agreement with an existing investor to provide additional cash availability of up to $5.0 million. As of December 31, 2013, the Company had not drawn any funds from the agreement and the facility expired in October 2013 in accordance with its terms.

In October 2013, the Company sold and issued the Temasek Bridge Note to Temasek for a bridge loan of $35.0 million. The Temasek Bridge Note was due on February 2, 2014 and accrued interest at a rate of 5.5% each four months from October 4, 2013. The note was cancelled on October 16, 2013 as payment for Temasek's purchase of the first tranche convertible note in the August 2013 Financing. As a result of the exchange and cancellation of the $35.0 million Temasek Bridge Note and the $9.2 million Total convertible note for the Tranche I Notes, the Company recorded a loss from extinguishment of debt of $19.9 million.

In October 2013, the Company amended the August 2013 SPA (see Note 1, "The Company") to include Fidelity Entities in the first tranche convertible promissory notes in the principal amount of $7.6 million, and to proportionally increase the amount acquired by exchange and cancellation of outstanding convertible promissory notes held by Total in connection with its exercise of pro rata rights to $14.6 million ($9.2 million in the first tranche and up to $5.4 million in the second tranche). Also in October 2013, the Company completed the closing of the Tranche I Notes of the August 2013 Financing, issuing a total of $51.8 million in convertible promissory notes for cash proceeds of $7.6 million and cancellation of outstanding convertible promissory notes of $44.2 million, of which $35.0 million resulted from cancellation of the Temasek Bridge Note. The Tranche I Notes are due sixty months from the date of issuance and will be convertible into the Company's common stock at a conversion price equal to $2.44, subject to adjustment as described below. The Tranche I Notes are convertible at the option of the holder: (i) at any time after 18 months from the date of the August 2013 SPA, (ii) on a change of control of the Company and (iii) upon the occurrence of an event of default. The conversion price of the Tranche I Notes will be reduced to $2.15 if a specified Company manufacturing plant fails to achieve a total production of

1.0 million liters within a run period of 45 days prior to June 30, 2014, the Company fails to achieve gross margins from product sales of at least 5% prior to June 30, 2014, or the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes. If either of the production and margin milestones occur, and in addition, the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes, the conversion price of the Tranche I Notes will be reduced to $1.87. Each Tranche I Note accrues interest from the date of issuance until the earlier of the date that such Tranche I Note is converted into the Company's common stock or is repaid in full. Interest accrues at a rate of 5% per six months, compounded semiannually (with graduated interest rates of 6.5% applicable to the first 180 days and 8% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at 6.5% for all other defaults). Interest for the first 30 months is payable in kind and added to the principal every six-months and thereafter, the Company may continue to pay interest in kind by adding to the principal every six-months or may elect to pay interest in cash. The Tranche I Notes may be prepaid by the Company after 30 months from the issuance date and initial interest payment; thereafter the Company has the option to prepay the Tranche I Notes every six months at the date of payment of the semi-annual coupon.

The convertible promissory notes issuable in the second tranche of the August 2013 Financing (referred to as the Tranche II Notes) would be due 5 years after the date of the issuance of the first Tranche II Notes and would be subject to a conversion price equal to $2.87, subject to adjustment as described below. Specifically, the Tranche II Notes would be convertible at the option of the holder (i) at any time 12 months after issuance, (ii) on a change of control of the Company, and (iii) upon the occurrence of an event of default. Each Tranche II Notes will accrue interest from the date of issuance until the earlier of the date that such Tranche II Notes is converted into the Company's common stock or repaid in full. Interest will accrue at a rate per annum equal to 10%, compounded annually (with graduated interest rates of 13% applicable to the first 180 days and 16% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at a rate equal to 12% for all other defaults). Interest for the first 36 months shall be payable in kind and added to the principal every year following the issue date and thereafter, the Company may continue to pay interest in kind by adding to the principal on every year anniversary of the issue date or may elect to pay interest in cash.

In addition to the conversion price adjustments set forth above, the conversion prices of the Tranche I Notes and Tranche II Notes are subject to further adjustment (i) according to proportional adjustments to outstanding common stock of the Company in case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to notes held by any purchaser other than Total, in the event that Total exchanges existing convertible notes for new securities of the Company in connection with future financing transactions in excess of its pro rata amount. Notwithstanding the foregoing, holders of a majority of the principal amount of the notes outstanding at the time of conversion may waive any anti-dilution adjustments to the conversion price. The purchasers have a right to require repayment of 101% of the principal amount of the notes in the event of a change of control of the Company and the notes provide for payment of unpaid interest on conversion following such a change of control if the purchasers do not require such repayment. The August 2013 SPA, Tranche I Notes and Tranche II Notes include covenants regarding payment of interest, maintenance of the Company's listing status, limitations on debt and on certain liens, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the August 2013 SPA, Tranche I Notes and Tranche II Notes, with default interest rates and associated cure periods applicable to the covenant.

In December 2013, in connection with the execution of the Shareholders Agreement, License Agreement and related documents (collectively, referred to as the JV Documents) entered into by and among Amyris, Total and Total Amyris BioSolutions B.V. (or JVCO) relating to the establishment of JVCO (see Note 7, "Joint Venture and Noncontrolling Interest"), Amyris has agreed to (i) exchange the $69.0 million outstanding Total unsecured convertible notes and issue a replacement 1.5% senior secured convertible notes, in principal amounts equal to the principal amount of each cancelled note (the "Replacement Notes") and (ii) to grant to Total a security interest in and lien on all Amyris' rights, title and interest in and to Amyris' shares in the capital of JVCO. Any Securities to be purchased and sold at the Third Closing (see Note 8, "Significant Agreements") by Total shall be 1.5% senior secured convertible notes shall have a conversion price of $7.0682. As a consequence of executing the JV Documents and forming JVCO, the Second Amendment of the August 2013 SPA and Restated Intellectual Property Security Agreement dated as of October 16, 2013, executed by Amyris in favor of Total, Temasek, and certain entities affiliated with Fidelity Investments, under which the Company granted a security interest in all of Amyris' intellectual property was automatically terminated effective as of December 2, 2013 upon Total's and the Company's joint written notice to Temasek.

In December 2013, the Company placed a $3.0 million of senior unsecured convertible notes under the second tranche of August 2013 Financing to funds affiliated with Wolverine Asset Management (or Wolverine) and elected to call $25.0 million in additional funds from Temasek pursuant to its previous commitment to purchase such amount of convertible promissory notes in the second tranche. Additionally, in December 2013, the Company agreed to sell approximately $6.0 million of convertible promissory notes in the second tranche to Total through cancellation of the same amount of principal of previously outstanding convertible notes held by Total in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation. The second tranche funding closed in the first quarter of 2014.

As of December 31, 2013 and 2012, $89.5 million and $39.0 million, respectively, was outstanding under these convertible notes, net of debt discount of $27.9 million and $9.3 million, respectively. The debt discount is the result of the bifurcation of the equity conversion option and "make-whole" provision features associated with outstanding debt. For the year ended December 31, 2013, 2012 and 2011, the Company recorded loss from extinguishment of debt from the exchange and cancellation of related party convertible notes of $19.9 million, $0.9 million, and zero, respectively.

Loans Payable

In December 2009, the Company entered into a loans payable agreement with the lessor of its Emeryville pilot plant under which it borrowed a total of $0.3 million, bearing an interest rate of 10.0% per annum and to be repaid over a period of 96 months. As of December 31, 2013 and 2012, a principal amount of zero and $0.2 million, respectively, was outstanding under the loan. In June 2013, as part of the April 30, 2013 amendment entered into regarding the Company's operating lease for its headquarters, the Company recorded the elimination of this loan payable as a lease incentive and recorded approximately $0.2 million to deferred rent liability in the consolidated balance sheet. The deferred rent liability is being amortized to expense over the remaining lease term.

In December 2011, the Company entered into a loan agreement with Banco Pine under which Banco Pine provided the Company with a short term loan of R$35.0 million (approximately US$14.9 million based on the exchange rate as of December 31, 2013). Such loan was an advance on an anticipated July 2012 financing from Nossa Caixa Desenvolvimento, ("Nossa Caixa"), the Sao Paulo State development bank, and Banco Pine, under which Banco Pine and Nossa Caxia would provide the Company with loans of up to approximately R$52.0 million (approximately US$25.6 million based on the exchange rate as of December 31, 2013) as financing for capital expenditures relating to the Company's manufacturing facility in Brotas. The interest rate for the loan was 119.2% of the Brazilian interbank lending rate (approximately 12.3% on an annualized basis). The principal and interest due on the principal under the loan agreement, as amended, matured and was repaid on August 15, 2012.

In June 2012, the Company entered into a separate loan agreement with Banco Pine under which Banco Pine provided the Company with a Banco Pine Bridge Loan of R$52.0 million (approximately US$25.6 million based on the exchange rate as of September 30, 2012 the time of loan repayment). The interest rate for the Banco Pine Bridge Loan was 0.4472% monthly (approximately 5.5% on an annualized basis). The principal and interest due under the bridge loan matured and were required to be repaid on September 19, 2012, subject to extension by Banco Pine. At the time of this bridge loan, the Company entered into a currency interest rate swap arrangement with the lender for R$22.0 million (approximately US$9.4 million based on the exchange rate as of December 31, 2013). The interest rate swap arrangement exchanged the principal and interest payments under the Banco Pine Loan of R$22.0 million entered into in July 2012 for alternative principal and interest payments that were subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap had a fixed interest rate of 3.94%. In July 2012, the Company repaid the Banco Pine Bridge Loan.

In July 2012, the Company entered into a Note of Bank Credit and a Fiduciary Conveyance of Movable Goods Agreement (together, referred to as the July 2012 Bank Agreements) with each of Nossa Caixa and Banco Pine. Under the July 2012 Bank Agreements, the Company pledged certain farnesene production assets as collateral for the loans of R$52.0 million. The Company's total acquisition cost for such pledged assets was approximately R$68.0 million (approximately US$29.0 million based on the exchange rate as of December 31, 2013). The Company is a also a parent guarantor for the payment of the outstanding balance under these loan agreements. Under the July 2012 Bank Agreements, the Company could borrow an aggregate of R$52.0 million (approximately US$22.2 million based on the exchange rate as of December 31, 2013) as financing for capital expenditures relating to the Company's manufacturing facility located in Brotas, Brazil. Specifically, Banco Pine, agreed to lend R$22.0 million and Nossa Caixa agreed to lend R$30.0 million. The funds for the loans are provided by BNDES, but are guaranteed by the lenders. The loans have a final maturity date of July 15, 2022 and bear a fixed interest rate of 5.5% per year. The loans are also subject to early maturity and delinquency charges upon occurrence of certain events including interruption of manufacturing activities at the Company's manufacturing facility in Brotas, Brazil for more than 30 days, except during sugarcane off-season. For the first two years that the loans are outstanding, the Company is required to pay interest only on a quarterly basis. After August 15, 2014, the Company is required to pay equal monthly installments of both principal and interest for the remainder of the term of the loans. As of December 31, 2013 and 2012, a principal amount of $22.2 million and $25.4 million, respectively, was outstanding under these loan agreements.

In October 2012, the Company entered into a loans payable agreement with a lender under which it borrowed $0.6 million to pay the insurance premiums of certain schedule of policies. The loan is payable in nine monthly installments of principal and interest. Interest accrued at a rate of 3.24% per annum. The loan was settled in 2013. In October 2013, the Company entered into another loan amounting to $0.6 million to pay for the current insurance premiums under the same terms. As of December 31, 2013 and 2012, the outstanding unpaid loan balance was $0.4 million and $0.4 million, respectively.

In March 2013, the Company entered into an export financing agreement with ABC for approximately $2.5 million a one-year-term to fund exports through March 2014. This loan is collateralized by future exports from the Company's subsidiary in Brazil. As of December 31, 2013, the principal amount outstanding under this agreement was $2.5 million.

Letters of Credit

In June 2012, the Company entered into a letter of credit agreement for $1.0 million under which it provided a letter of credit to the landlord for its headquarters in Emeryville, California in order to cover the security deposit on the lease. This letter of credit is secured by a certificate of deposit. Accordingly, the Company has $0.9 million as restricted cash as of December 31, 2013 and 2012.

Future minimum payments under the debt agreements as of December 31, 2013 are as follows (in thousands):

Years ending December 31:	Related Party Convertible Debt	Convertible Debt	Notes Payable	Loans Payable	Credit Facility
2014	$ —	$ 760	$ —	$ 5,753	$ 2,552
2015	—	765	—	3,848	2,420
2016	—	760	—	3,700	2,288
2017	73,687	25,125	—	3,547	2,155
2018	72,381	12,331	—	3,396	445
Thereafter	—	—	—	10,817	107
Total future minimum payments	146,068	39,741	—	31,061	9,967
Less: amount representing interest[1]	(56,569)	(11,204)	—	(5,802)	(1,200)
Present value of minimum debt payments	89,499	28,537	—	25,259	8,767
Less: current portion	—	—	—	(4,333)	(2,058)
Noncurrent portion of debt	$ 89,499	$ 28,537	$ —	$ 20,926	$ 6,709

(1) Including debt discount of \$27.9 million related to the embedded derivative associated with the related party convertible debt which will be accreted to interest expense under the effective interest method over the term of the convertible debt.

6. Commitments and Contingencies

Lease Obligations

The Company leases certain facilities and finances certain equipment under operating and capital leases, respectively. Operating leases include leased facilities and capital leases include leased equipment (see Note 4, “Balance Sheet Components”). The Company recognizes rent expense on a straight-line basis over the noncancellable lease term and records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability. Where leases contain escalation clauses, rent abatements, and/or concessions, such as rent holidays and landlord or tenant incentives or allowances, the Company applies them in the determination of straight-line rent expense over the lease term. The Company has noncancellable operating lease agreements for office, research and development, and manufacturing space that expire at various dates, with the latest expiration in February 2031. Rent expense under operating lease was \$4.8 million, \$4.9 million and \$4.8 million, for the years ended December 31, 2013, 2012 and 2011, respectively.

In December 2011, the Company executed an equipment financing agreement for \$3.0 million for certain qualifying manufacturing and laboratory equipment. Pursuant to the equipment financing agreement, the Company financed the equipment with transactions representing capital leases. This sales/leaseback transaction resulted in a \$1.3 million unrealized loss which is being amortized over the life of the assets under lease. Accordingly, a capital lease liability was recorded at the present value of the future lease payments of \$1.2 million and \$2.2 million during the years ended December 31, 2013 and 2012, respectively. The incremental borrowing rate used to determine the present values of the future lease payments was 6.5%. The lease obligations expire on January 1, 2015. In connection with the capital lease entered into in 2011, the Company issued a warrant to purchase shares of the Company’s common stock (see Note 10, “Stockholder’s Equity”).

In 2007, the Company entered into an operating lease for its headquarters in Emeryville, California, with a term of ten years commencing in May 2008. As part of the operating lease agreement, the Company received a tenant improvements allowance of \$11.4 million. The Company recorded the allowance as deferred rent and associated expenditures as leasehold improvements that are being amortized over the shorter of their estimated useful life or the term of the lease. In connection with the operating lease, the Company elected to defer a portion of the monthly base rent due under the lease and entered into notes payable agreements with the lessor for the purchase of certain tenant improvements. In October 2010, the Company amended its lease agreement with the lessor of its headquarters, to lease up to approximately 22,000 square feet of research and development and office space. In return for the removal of the early termination clause in its amended lease agreement, the Company received approximately \$1.0 million from the lessor in December 2010. In April 2013, the Company amended its lease agreement for its headquarters in Emeryville, California (referred to as the Lease Amendment). The Lease Amendment provided for an extension of the lease term to May 2023, a modification of the base rent and elimination of the Company’s loans and notes payable to the lessor of approximately \$1.6 million (see Note 5, “Debt”). In addition, per the terms of the Lease Amendment, the Company also received a rent credit of approximately \$71,000 per month for the period of June 2013 through December 2013 and a rent credit of approximately \$42,000 per month for the full year of 2014.

In March 2011, the Company entered into an operating lease on real property owned by Paraíso Bioenergia S.A. (“Paraíso Bioenergia”) in Brazil. In conjunction with a supply agreement (see Note 8, “Significant Agreements”) with the same entity, the land is being used by the Company for its Biofene production plant in Brotas. This lease has a term of 15 years commencing in March 2011 with an estimated annual rent payment of approximately \$116,000.

In August 2011, the Company notified the lessor of its leased office facilities in Brazil of the Company’s termination of its existing lease effective November 30, 2011. At the same time, the Company entered into an operating lease for new office facilities in Campinas, Brazil. The new lease has a term of 5 years commencing in November 2011 with an estimated annual rent payment of approximately $367,000.

In October 2012, an operating lease associated with the Company's pilot plant in Brazil was amended. As a result of this amendment, the Company's operating lease was extended and the new expiration is October 2015 and included an amendment to the terms of restitution of the property under lease. As a result of this amendment, the Company no longer has asset retirement obligations and therefore reversed the previously accrued liabilities.

Future minimum payments under the Company's lease obligations as of December 31, 2013, are as follows (in thousands):

Years ending December 31:	Capital Leases	Operating Leases	Total Lease Obligations
2014	$ 1,006	$ 6,404	$ 7,410
2015	289	6,622	6,911
2016	—	6,600	6,600
2017	—	6,580	6,580
2018	—	6,667	6,667
Thereafter	—	32,259	32,259
Total future minimum lease payments	1,295	$ 65,132	$ 66,427
Less: amount representing interest	(52)		
Present value of minimum lease payments	1,243		
Less: current portion	(956)		
Long-term portion	$ 287		

Guarantor Arrangements

The Company has agreements whereby it indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at the Company's request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer insurance policy that limits its exposure and enables the Company to recover a portion of any future amounts paid. As a result of its insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal. Accordingly, the Company had no liabilities recorded for these agreements as of December 31, 2013 and 2012.

The Company entered into the FINEP Credit Facility to finance a research and development project on sugarcane-based biodiesel (see Note 5, "Debt"). The FINEP Credit Facility is guaranteed by a chattel mortgage on certain equipment of the Company. The Company's total acquisition cost for the equipment under this guarantee is approximately R$6.0 million (approximately US$2.6 million based on the exchange rate as of December 31, 2013).

The Company entered into the BNDES Credit Facility to finance a production site in Brazil (see Note 5, "Debt").The BNDES Credit Facility is collateralized by a first priority security interest in certain of the Company's equipment and other tangible assets with a total acquisition cost of R$24.9 million (approximately US$10.6 million based on the exchange rate as of December 31, 2013). The Company is a parent guarantor for the payment of the outstanding balance under the BNDES Credit Facility. Additionally, the Company is required to provide certain bank guarantees under the BNDES Credit Facility. Accordingly, the Company has a $0.7 million and zero as restricted cash as of December 31, 2013 and 2012, respectively.

The Company entered into loan agreements and security agreement where the Company pledged certain farnesene production assets as collateral (the fiduciary conveyance of movable goods) with each of Nossa Caixa and Banco Pine (see Note 5, "Debt"). The Company's total acquisition cost for the farnesene production assets pledged as collateral under these agreements is approximately R$68.0 million (approximately US$29.0 million based on the exchange rate as of December 31, 2013). The Company is also a parent guarantor for the payment of the outstanding balance under these loan agreements.

The Company has an export financing agreement for approximately $2.5 million for a one-year term to fund exports through March 2014. This loan is collateralized by future exports from the Company's subsidiary in Brazil.

Under an operating lease agreement for its office facilities in Brazil, which commenced on November 15, 2011, the Company is required to maintain restricted cash or letters of credit equal to 3 months of rent of approximately R$0.2 million (approximately US$0.1 million based on the exchange rate as of December 31, 2013) in the aggregate as a guarantee that the Company will meet its performance obligations under such operating lease agreement.

In October 2013, the Company entered into a letter agreement with Total relating to the Temasek Bridge Note and to the closing of the August 2013 Financing (referred to as the Amendment Agreement) (see Note 5, "Debt"). In the August 2013 Financing, the Company was required to provide the purchasers under the August 2013 SPA with a security interest in the Company's intellectual property if Total still held such security interest as of the initial closing of the August 2013 Financing. Under the terms of a previous Intellectual Property Security Agreement by and between the Company and Total (referred to as the Security Agreement), the Company had previously granted a security interest in favor of Total to secure the obligations of the Company under certain convertible promissory notes issued and issuable to Total under the Company's purchase agreement with Total Purchase Agreement. The Security Agreement provides that such security interest will terminate if Total and the Company enter into certain agreements relating to the formation of the Fuels JV. To get Total to (i) permit the Company to grant the security interest under the Temasek Bridge Note and the August 2013 Financing and (ii) waive a secured debt limitation contained in the outstanding convertible promissory notes held by Total (the "Total Securities"), the Company entered into the Amendment Agreement. Under the Amendment Agreement, the Company agreed to reduce, effective December 2, 2013, the conversion price for the Total Securities issued in 2012 (approximately $48.3 million of which are outstanding as of the date hereof) from $7.0682 per share to $2.20, the market price per share of the Company's Common Stock as of the signing of the Amendment Agreement, as determined in accordance with applicable NASDAQ rules, unless the Company and Total enter into the JV Agreements on or prior to December 2, 2013.

In December 2013, in connection with the execution of JV Documents entered into by and among Amyris, Total and JVCO relating to the establishment of the JVCO (see Note 5, "Debt" and Note 7, "Joint Venture and Noncontrolling Interest"), Amyris agreed to exchange the $69.0 million outstanding Total unsecured convertible notes and issue replacement 1.5% senior secured convertible notes, in principal amounts equal to the principal amount of each Replacement Notes and grant a security interest to Total in and lien on all Amyris' rights, title and interest in and to Amyris' shares in the capital of the JVCO.

Purchase Obligations

As of December 31, 2013, the Company had $9.6 million in purchase obligations which included $8.9 million in non-cancellable contractual obligations and construction commitments, of which $4.0 million have been accrued as loss on purchase commitments.

Other Matters

Certain conditions may exist as of the date the financial statements are issued, which may result in a loss to the Company but will only be recorded when one or more future events occur or fail to occur. The Company's management assesses such contingent liabilities, and such assessment inherently involves an exercise of judgment. In assessing loss contingencies related to legal proceedings that are pending against and by the Company or unasserted claims that may result in such proceedings, the Company's management evaluates the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought.

If the assessment of a contingency indicates that it is probable that a material loss has been incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in the Company's financial statements. If the assessment indicates that a potential material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material would be disclosed. Loss contingencies considered to be remote by management are generally not disclosed unless they involve guarantees, in which case the guarantee would be disclosed.

In May 2013, a securities class action complaint was filed against the Company and its CEO, John G. Melo, in the U.S. District Court for the Northern District of California. In October 2013, the lead plaintiffs filed a consolidated amended complaint. The complaint, as amended, sought unspecified damages on behalf of a purported class that would comprise all individuals who acquired the Company's common stock between April 29, 2011 and February 8, 2012. The complaint alleged securities law violations based on the Company's commercial projections during that period. In December 2013, the Company filed a motion to dismiss the complaint. In March 2014, the court issued an order granting the Company's motion to dismiss with leave to amend the complaint. The Company believes the complaint lacks merit, and intends to defend itself vigorously. Because the case is at a very early stage and no specific monetary demand has been made, it is not possible for us to estimate the potential loss or range of potential losses for the case.

In August 2013, a complaint entitled Steve Shannon, derivatively on behalf of Amyris, Inc. v. John G. Melo et al and Amyris, Inc., was filed against the Company as nominal defendant in the United States District Court for the Northern District of California. The lawsuit seeks unspecified damages on behalf of the Company from certain of its current and former officers, directors and employees and alleges these defendants breached their fiduciary duties to the Company and unjustly enriched themselves by making allegedly false and misleading statements and omitting certain material facts in the Company's securities filings. Because this purported stockholder derivative action is based on substantially the same facts as the securities class action described above, the two actions have been related and will be heard by the same judge. By stipulation of the parties, the case has been stayed until the Company either files an answer in the securities class action or the securities action is dismissed with prejudice. The Company does not believe the claims in the complaint have merit, and intends to defend itself vigorously. Because the case is at a very early stage and no specific monetary demand has been made, it is not possible to estimate the potential loss or range of potential losses for the case.

The Company is subject to disputes and claims that arise or have arisen in the ordinary course of business and that have not resulted in legal proceedings or have not been fully adjudicated. Such matters that may arise in the ordinary course of business are subject to many uncertainties and outcomes are not predictable with assurance. Therefore, if one or more of these legal disputes or claims resulted in settlements or legal proceedings that were resolved against the Company for amounts in excess of management's expectations, the Company's consolidated financial statements for the relevant reporting period could be materially adversely affected.

7. Joint Venture and Noncontrolling Interest

SMA Indústria Química S.A.

In April 2010, the Company established SMA Indústria Química (or SMA), a joint venture with SMSA, to build a production facility in Brazil. SMA is located at the SMSA mill in Pradópolis, São Paulo state. The joint venture agreements establishing SMA have a 20 year initial term.

SMA is managed by a three member executive committee, of which the Company appoints two members, one of whom is the plant manager who is the most senior executive responsible for managing the construction and operation of the facility. SMA is governed by a four member board of directors, of which the Company and SMSA each appoint two members. The board of directors has certain protective rights which include final approval of the engineering designs and project work plan developed and recommended by the executive committee.

The joint venture agreements require the Company would fund the construction costs of the new facility and SMSA would reimburse the Company up to R$\$$61.8 million (approximately US$\$$26.4 million based on the exchange rate as of December 31, 2013) of the construction costs after SMA commences production. After commercialization, the Company would market and distribute Amyris renewable products produced by SMA and SMSA would sell feedstock and provide certain other services to SMA.

The cost of the feedstock to SMA would be a price that is based on the average return that SMSA could receive from the production of its current products, sugar and ethanol. The Company would be required to purchase the output of SMA for the first four years at a price that guarantees the return of SMSA's investment plus a fixed interest rate. After this four year period, the price would be set to guarantee a break-even price to SMA plus an agreed upon return.

Under the terms of the joint venture agreements, if the Company becomes controlled, directly or indirectly, by a competitor of SMSA, then SMSA has the right to acquire the Company's interest in SMA. If SMSA becomes controlled, directly or indirectly, by a competitor of the Company, then the Company has the right to sell its interest in SMA to SMSA. In either case, the purchase price shall be determined in accordance with the joint venture agreements, and the Company would continue to have the obligation to acquire products produced by SMA for the remainder of the term of the supply agreement then in effect even though the Company would no longer be involved in SMA's management.

The Company has a 50% ownership interest in SMA. The Company has identified SMA as a variable interest entity (or VIE) pursuant to the accounting guidance for consolidating VIEs because the amount of total equity investment at risk is not sufficient to permit SMA to finance its activities without additional subordinated financial support, as well as because the related commercialization agreement provides a substantive minimum price guarantee. Under the terms of the joint venture agreement, the Company directs the design and construction activities, as well as production and distribution. In addition, the Company has the obligation to fund the design and construction activities until commercialization is achieved. Subsequent to the construction phase, both parties equally fund SMA for the term of the joint venture. Based on those factors, the Company was determined to have the power to direct the activities that most significantly impact SMA's economic performance and the obligation to absorb losses and the right to receive benefits. Accordingly, the financial results of SMA are included in the Company's consolidated financial statements and amounts pertaining to SMSA's interest in SMA are reported as noncontrolling interests in subsidiaries.

The Company completed a significant portion of the construction of the new facility in 2012. The Company suspended construction of the facility in order to focus on completing and operating the Company's smaller production facility in Brotas, Brazil. In February 2014, the Company entered into an amendment to the joint venture agreement with SMSA which updates and documents certain preexisting business plan requirements related to the start-up of construction at the joint venture operated plant and sets forth, among other things, (i) the extension of the deadline for the commencement of operations at the joint venture operated plant to no later than 18 months following the construction of the plant, which shall occur no later than March 31, 2017, and (ii) the extension of an option held by SMSA to build a second large-scale farnesene production facility to no later than December 31, 2018 with the commencement of operations at such second facility to occur no later than April 1, 2019.

Novvi S.A.

In June 2011, the Company entered into joint venture agreements with Cosan Combustíveis e Lubrificantes S.A. and Cosan S.A. Industria e Comércio (such Cosan entities, collectively or individually, "Cosan"), related to the formation of a joint venture to focus on the worldwide development, production and commercialization of base oils made from Biofene for the automotive, commercial and industrial lubricants markets (referred to as the Original JV Agreement). The parties originally envisioned operating their joint venture through Novvi S.A., a Brazilian entity jointly owned by Cosan and Amyris Brasil.

Under the Original JV Agreement and related agreements, the Company and Cosan each owned 50% of the Novvi S.A. and each party would share equally in any costs and any profits ultimately realized by Novvi S.A. The joint venture agreement had an initial term of 20 years from the date of the Original JV Agreement, subject to earlier termination by mutual written consent or by a non-defaulting party in the event of specified defaults by the other party. The shareholders' agreement had an initial term of 10 years from the date of the agreement, subject to earlier termination if either the Company or Cosan ceases to own at least 10% of the voting stock of Novvi S.A. Since its formation, Novvi S.A. had minimal operating activities while the Company and Cosan continued to determine and finalize the strategy and operating activities for the joint venture. Upon determination by the Company and Cosan that the joint venture should be operated out of a US entity, the operating activities of Novvi S.A. ceased. The Company has identified that Novvi S.A. is a VIE and determined that the power to direct activities, which most significantly impact the economic success of the joint venture, is equally shared between the Company and Cosan. Accordingly, the Company is not the primary beneficiary and therefore accounts for its investment in Novvi S.A. under the equity method of accounting.

In March 2013, the Company, Amyris Brasil and Cosan entered into a termination agreement to terminate the Original JV Agreement. In addition, Amyris Brasil agreed to sell, its 50% ownership in Novvi S.A. for approximately R$22,000 (approximately US$9,391 based on the exchange rate as of December 31, 2013) which represented the current value of its 50% equity ownership in Novvi S.A., a now-dormant company, to Cosan. Upon the consummation of the transaction with the shares transferring from Amyris Brasil to Cosan, the Novvi S.A. shareholders agreement automatically terminated.

Novvi LLC

In September 2011, the Company and Cosan US, Inc. (or Cosan U.S.) formed Novvi LLC, a U.S. entity that is jointly owned by the Company and Cosan U.S. (or Novvi). In March 2013, the Company and Cosan U.S. entered into agreements to (i) expand their base oils joint venture to also include additives and lubricants and (ii) operate their joint venture exclusively through Novvi. Specifically, the parties entered into an Amended and Restated Operating Agreement for Novvi (referred to as the Operating Agreement), which sets forth the governance procedures for Novvi and the joint venture and the parties' initial contribution. The Company also entered into an IP License Agreement with Novvi (referred to as the IP License Agreement) under which the Company granted Novvi (i) an exclusive (subject to certain limited exceptions for the Company), worldwide, royalty-free license to develop, produce and commercialize base oils, additives, and lubricants derived from Biofene for use in automotive and industrial lubricants markets and (ii) a non-exclusive, royalty free license, subject to certain conditions, to manufacture Biofene solely for its own products. In addition, both the Company and Cosan U.S. granted Novvi certain rights of first refusal with respect to alternative base oil and additive technologies that may be acquired by the Company or Cosan U.S. during the term of the IP License Agreement. Under these agreements, the Company and Cosan U.S. will each own 50% of Novvi and each party will share equally in any costs and any profits ultimately realized by the joint venture. Novvi is governed by a six member Board of Managers (or the Board Managers), with three managers represented by each investor. The Board of Managers appoints the officers of Novvi, who are responsible for carrying out the daily operating activities of Novvi as directed by the Board of Managers. The IP License Agreement has an initial term of 20 years from the date of the agreement, subject to standard early termination provisions such as uncured material breach or a party's insolvency. Under the terms of the Operating Agreement, Cosan U.S. is obligated to fund its 50% ownership share of Novvi in cash in the amount of $10.0 million and the Company is obligated to fund its 50% ownership share of Novvi through the granting of an IP License to develop, produce and commercialize base oils, additives, and lubricants derived from Biofene for use in the automotive, commercial and industrial lubricants markets which has been agreed upon by Cosan U.S. and Amyris valued at $10.0 million. In March 2013, the Company measured its initial contribution of intellectual property to Novvi at the Company's carrying value of the licenses granted under the IP License Agreement, which was zero. Additional funding requirements to finance the ongoing operations of Novvi are expected to happen through revolving credit or other loan facilities provided by unrelated parties (i.e. such as financial institutions); cash advances or other credit or loan facilities provided by the Company and Cosan U.S. or their affiliates; or additional capital contributions by the Company and Cosan U.S.

The Company has identified Novvi as a VIE and determined that the power to direct activities, which most significantly impact the economic success of the joint venture (i.e. continuing research and development, marketing, sales, distribution and manufacturing of Novvi products), is equally shared between the Company and Cosan U.S. Accordingly, the Company is not the primary beneficiary and therefore accounts for its investment in Novvi under the equity method of accounting. The Company will continue to reassess its primary beneficiary analysis of Novvi if there are changes in events and circumstances impacting the power to direct activities that most significantly affect Novvi's economic success. Under the equity method, the Company's share of profits and losses are included in "Other income (expense), net" in the consolidated statements of operations. For the year ended December 31, 2013, the Company recorded no amounts for its share of Novvi's net loss as the carrying amount of the Company's investment in Novvi was zero and losses in excess of the carrying amount were offset by the accretion of the

Company's share in the basis difference resulting from the parties' initial contribution. The Company recorded $2.6 million of revenue from the research and development activities that it has performed on behalf of Novvi and recognized $1.1 million in product sales from Novvi for the year ended December 31, 2013.

Total Amyris BioSolutions B.V.

In November 2013, the Company and Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS, or Total), formed Total Amyris BioSolutions B.V., a private company with limited liability incorporated under the laws of the Netherlands (or JVCO). The common equity of JVCO is jointly owned (50%/50%) by the Company and Total, and the preferred equity of JVCO is 100% owned by the Company. The Parties have agreed that JVCO's purpose is limited to executing the License Agreement and maintaining such licenses under it, unless and until either (i) Total elects to go forward with either the full (diesel and jet fuel) JVCO commercialization program or the jet fuel component of the JVCO commercialization program (a "Go Decision"), (ii) Total elects to not continue its participation in the R&D Program and JVCO (a "No-Go Decision"), or (iii) Total exercises any of its rights to buy out the Company's interest in JVCO. Following a Go Decision, the articles and shareholders' agreement would be amended and restated to be consistent with the shareholders' agreement contemplated by the July 2012 Agreements (see Note 5, "Debt" and Note 8, "Significant Agreements").

The JVCO has an initial capitalization of €0.1 million (approximately US$0.1 million based on the exchange rate as of December 31, 2013). The Company has identified JVCO as a VIE and determined that the Company is not the primary beneficiary and therefore accounts for its investment in JVCO under the equity method of accounting. Under the equity method, the Company's share of profits and losses are included in "Other income (expense), net" in the consolidated statements of operations. No later than six months prior to July 31, 2016, the Company and Total shall amend the July 2012 Agreements to reflect the corporate structure of JVCO, amend and restate the articles of association of JVCO, finalize and agree on a five-year plan and an initial budget, maximize economic viability and value of JVCO and enter into the Total license agreement. The Company will reevaluate its assessment in 2016 based on the specific terms of the final shareholders' agreement.

Glycotech

In January 2011, the Company entered into a production service agreement (referred to as the Glycotech Agreement) with Glycotech, Inc. (or Glycotech), under which Glycotech provides process development and production services for the manufacturing of various Company products at its leased facility in Leland, North Carolina. The Company products manufactured by Glycotech are owned and distributed by the Company. Pursuant to the terms of the production Glycotech Agreement, the Company is required to pay the manufacturing and operating costs of the Glycotech facility, which is dedicated solely to the manufacture of Amyris products. The initial term of the Glycotech Agreement was for a two year period commencing on February 1, 2011 and the Glycotech Agreement renews automatically for successive one-year terms, unless terminated by the Company. Concurrent with the Glycotech Agreement, the Company also entered into a Right of First Refusal Agreement with the lessor of the facility and site leased by Glycotech (or the ROFR Agreement). Per conditions of the ROFR Agreement, the lessor agreed not to sell the facility and site leased by Glycotech during the term of the Glycotech Agreement. In the event that the lessor is presented with an offer to sell or decides to sell an adjacent parcel, the Company has the right of first refusal to acquire it.

The Company has determined that the arrangement with Glycotech qualifies as a VIE. The Company determined that it is the primary beneficiary of this arrangement since it has the power through the management committee over which it has majority control to direct the activities that most significantly impact Glycotech's economic performance. In addition, the Company is required to fund 100% of Glycotech's actual operating costs for providing services each month while the facility is in operation under the production service agreement. Accordingly, the Company consolidates the financial results of Glycotech. As of December 31, 2013, the carrying amounts of the consolidated VIE's assets and liabilities were not material to the Company's consolidated financial statements.

The table below reflects the carrying amount of the assets and liabilities of the two consolidated VIEs for which the Company is the primary beneficiary. As of December 31, 2013, the assets include $21.6

million in property, plant and equipment, \$3.9 million in other assets and \$0.3 million in current assets. The liabilities include \$0.1 million in accounts payable and accrued current liabilities and \$0.1 million in loan obligations by Glycotech to its shareholders that are non-recourse to the Company. The creditors of each consolidated VIE have recourse only to the assets of that VIE.

	December 31,	
(In thousands)	2013	2012
Assets	\$ 25,730	\$ 29,564
Liabilities	\$ 229	\$ 355

The change in noncontrolling interest for the years ended December 31, 2013 and 2012 is summarized below (in thousands):

	2013	2012
Balance at January 1	\$ (877)	\$ (240)
Addition to non-controlling interest	—	—
Foreign currency translation adjustment	89	257
Loss attributable to noncontrolling interest	204	(894)
Balance at December 31	\$ (584)	\$ (877)

8. Significant Agreements

Research and Development Activities

Total Collaboration Agreement

In June 2010, the Company entered into a technology license, development, research and collaboration agreement (referred to as the Collaboration Agreement") with Total Gas & Power USA Biotech, Inc., an affiliate of Total S.A. (Total S.A. and its relevant affiliates, collectively, "Total"). The Collaboration Agreement sets forth the terms for the research, development, production and commercialization of certain to-be-determined chemical and/or fuel products made through the use of the Company's synthetic biology platform. The Collaboration Agreement established a multiphased process through which projects are identified, screened, studied for feasibility, and ultimately selected as a project for development of an identified lead compound using an identified microbial strain. Under the terms of the Collaboration Agreement, Total funded up to the first \$50.0 million in research and development costs for the selected projects; thereafter the parties share such costs equally. Amyris has agreed to dedicate the laboratory resources needed for collaboration projects. Total also plans to second employees at Amyris to work on the projects. Once a development project has commenced, the parties are obligated to work together exclusively to develop the lead compound during the project development phase. After a development project is completed, the Company and Total expect to form one or more joint ventures to commercialize any products that are developed, with costs and profits to be shared on an equal basis, provided that if Total has not achieved profits from sales of a joint venture product equal to the amount of funding it provided for development plus an agreed upon rate of return within three years of commencing sales, then Total will be entitled to receive all profits from sales until this rate of return has been achieved. Each party has certain rights to independently produce commercial quantities of these products under certain circumstances, subject to paying royalties to the other party. Total has the right of first negotiation with respect to exclusive commercialization arrangements that the Company would propose to enter into with certain third parties, as well as the right to purchase any of the Company's products on terms no less favorable than those offered to or received by the Company from third parties in any market where Total or its affiliates have a significant market position.

The Collaboration Agreement has an initial term of twelve years and is renewable by mutual agreement by the parties for additional three year periods. Neither the Company nor Total has the right to terminate the agreement voluntarily. The Company and Total each have the right to terminate the agreement in the event the other party commits a material breach, is the subject of certain bankruptcy proceedings or challenges a patent licensed to it under the Collaboration Agreement. Total also has the right to terminate the Collaboration Agreement in the event the Company undergoes a sale or change of control to certain entities. If the Company terminates the Collaboration Agreement due to a breach, bankruptcy or patent challenge by Total, all licenses the Company has granted to Total terminate except licenses related to products for which Total has made a material investment and licenses related to products with respect to which binding commercialization arrangements have been approved, which will survive subject, in most cases, to the payment of certain royalties by Total to the Company. Similarly, if Total terminates the Collaboration Agreement due to a breach, bankruptcy or patent challenge by the Company, all licenses Total has granted to the Company terminate except licenses related to products for which the Company has made a material investment, certain grant-back licenses and licenses related to products with respect to which binding commercialization arrangements have been approved, which will survive subject, in most cases, to the payment of certain royalties to Total by the Company. On expiration of the Collaboration Agreement, or in the event the Collaboration Agreement is terminated for a reason other than a breach, bankruptcy or patent challenge by one party, licenses applicable to activities outside the collaboration generally continue with respect to intellectual property existing at the time of expiration or termination subject, in most cases, to royalty payments. There are circumstances under which certain of the licenses granted to Total will survive on a perpetual, royalty-free basis after expiration or termination of the Collaboration Agreement. Generally these involve licenses to use the Company's synthetic biology technology and core metabolic pathway for purposes of either independently developing further improvements to marketed collaboration technologies or products or the processes for producing them within a specified scope agreed to by the Company and Total prior to the time of expiration or termination, or independently developing early stage commercializing products developed from collaboration compounds that met certain performance criteria prior to the time the agreement expired or was terminated and commercializing products related to such compounds. After the Collaboration Agreement expires, the Company may be obligated to provide Total with ongoing access to Amyris laboratory facilities to enable Total to complete research and development activities that commenced prior to termination.

In June 2010, concurrent with the Collaboration Agreement, the Company issued 7,101,548 shares of Series D preferred stock to Total for aggregate proceeds of approximately $133.0 million at a per share price of $18.75, which was lower than the per share fair value of common stock as determined by management and the Board of Directors. Due to the fact the Collaboration Agreement and the issuance of shares to Total occurred concurrently, the terms of both the Collaboration Agreement and the issuance of preferred stock were evaluated to determine whether their separately stated pricing was equal to the fair value of services and preferred stock. The Company determined that the fair value of Series D preferred stock was $22.68 at the time of issuance, and therefore, the Company measured the preferred stock initially at its fair value with a corresponding reduction in the consideration for the services under the Collaboration Agreement. As revenue from the Collaboration Agreement will be generated over a period of time based on the performance requirements, the Company recorded the difference between the fair value and consideration received for the Series D preferred stock of $27.9 million as a Deferred Charge Asset within "Other Assets" on the balance sheet at the time of issuance which will be recognized as a reduction to revenue in proportion to the total estimated revenue under the collaboration agreement. As of December 31, 2013 and 2012, the Company has recognized a cumulative reduction of $27.9 million and $27.9 million, respectively, against the deferred charge asset.

As a result of recording the Series D preferred stock at its fair value, the effective conversion price was greater than the fair value of common stock as determined by management and the Board of Directors. Therefore, no beneficial conversion feature was recorded at the time of issuance. The Company further determined that the conversion option with a contingent reduction in the conversion price upon a qualified IPO was a potential contingent beneficial feature and, as a result, the Company calculated the intrinsic value of such conversion option upon occurrence of the qualified IPO. The Company determined that a contingent beneficial conversion feature existed and the Company recorded a charge within the equity section of its balance sheet, which impacted earnings per share for the year ended December 31, 2010, based upon the price at which shares were offered to the public in the IPO in relation to the adjustment provisions provided for the Series D preferred stock.

In connection with Total's equity investment, the Company agreed to appoint a person designated by Total to serve as a member of the Company's Board of Directors in the class subject to the latest reelection date, and to use reasonable efforts, consistent with the Board of Directors' fiduciary duties, to cause the director designated by Total to be re-nominated by the Board of Directors in the future. These membership rights terminate upon the earlier of Total holding less than half of the shares of common stock originally issuable upon conversion of the Series D preferred stock or a sale of the Company.

The Company also agreed with Total that, so long as Total holds at least 10% of the Company's voting securities, the Company will notify Total if the Company's Board of Directors seeks to cause the sale of the Company or if the Company receives an offer to be acquired. In the event of such decision or offer, the Company must provide Total with all information given to an offering party and certain other information, and Total will have an exclusive negotiating period of fifteen business days in the event the Board of Directors authorizes the Company to solicit offers to buy the Company, or five business days in the event that the Company receives an unsolicited offer to be acquired. This exclusive negotiation period will be followed by an additional restricted negotiation period of ten business days, during which the Company will be obligated to negotiate with Total and will be prohibited from entering into an agreement with any other potential acquirer. Total has also entered into a standstill agreement pursuant to which it agreed for a period of three years not to acquire in excess of the greater of 20% of the number of shares of Series D preferred stock purchased by Total (during the initial two years) or 30% (during the third year) of the Company's common stock without the prior consent of the Company's Board of Directors, except that, among other things, if another person acquires more than Total's then current holdings of the Company's common stock, then Total may acquire up to that amount plus one share.

In November 2011, the Company and Total entered into an amendment of their Technology License, Development, Research and Collaboration Agreement (referred to as the Amendment). The Amendment provided for an exclusive strategic collaboration for the development of renewable diesel products and contemplated that the parties would establish a joint venture (or the JV) for the production and commercialization of such renewable diesel products on an exclusive, worldwide basis. In addition, the Amendment contemplated providing the JV with the right to produce and commercialize certain other chemical products on a non-exclusive basis. The amendment further provided that definitive agreements to form the JV had to be in place by March 31, 2012 or such other date as agreed to by the parties or the renewable diesel program, including any further collaboration payments by Total related to the renewable diesel program, would terminate. In the second quarter of 2012, the parties extended the deadline to June 30, 2012, and, through June 30, 2012 the parties were engaged in discussions regarding the structure of future payments related to the program, until the amendment was superseded by a further amendment in July 2012.

Pursuant to the Amendment, Total agreed to fund the following amounts: (i) the first $30.0 million in research and development costs related to the renewable diesel program which have been incurred since August 1, 2011, which amount would be in addition to the $50.0 million in research and development funding contemplated by the Collaboration Agreement, and (ii) for any research and development costs incurred following the JV formation date that were not covered by the initial $30.0 million, an additional $10.0 million in 2012 and up to an additional $10.0 million in 2013, which amounts would be considered part of the $50.0 million contemplated by the Collaboration Agreement. In addition to these payments, Total further agreed to fund 50% of all remaining research and development costs for the renewable diesel program under the Amendment.

In July 2012, the Company entered into the July 2012 Agreements with Total that expanded Total's investment in the biofene collaboration to encompass certain joint venture products for use in diesel and jet fuel on a worldwide basis and provide a new structure for the research and development program and formation of the joint venture (or the Fuels JV), to commercialize the products encompassed by the diesel and jet fuel research and development program (the "Program") and change the structure of the funding from Total to include a convertible debt mechanism (see Note 5, "Debt"). As a part of the July 2012 Agreements, Total's royalty option contingency related to diesel was removed and the jet fuel collaboration was combined with the expanded biofene collaboration. As a result, $46.5 million of payments received from Total that had been recorded as an advance from the collaborator were no longer contingently repayable. Of this amount, $23.3 million was treated as a repayment by the Company and included as part of the senior unsecured convertible promissory note issued to Total in July 2012 and the remaining $23.2 million was recorded as a contract to perform research and development services, which was offset by the reduction of the capitalized deferred charge asset of $14.4 million resulting in the Company recording revenue from a related party of $8.9 million in 2012.

Under the July 2012 Agreements, the Company controls operations and execution of the Program subject to strategic and ultimate decision-making authority by a management committee composed of Company and Total representatives, and Total participates in the ultimate Fuels JV, or receives rights to recover its investment if, at a series of decision points, it decides not to proceed with the project. The agreements contemplate that the parties would grant exclusive manufacturing and commercial licenses to the Fuels JV for the Fuels JV products when the Fuels JV is formed (subject to requirements for the Company to grant the license to Total in the event the Fuels JV is not formed because of a deadlock, followed by an election by the Company to sell to Total the assets it otherwise would have contributed to the Fuels JV, or earlier under certain circumstances), and that the Company would retain the right to make and sell products other than the Fuels JV products. Under the agreements, the Fuels JV licenses would be consistent with the principle that development, production and commercialization of the Fuels JV products in Brazil will remain with the Company unless Total elects, after formation of the Fuels JV, to have such business contributed to the Fuels JV. The agreements also provide that certain Fuels JV non-exclusive products that were contemplated by the November 2011 amendment to the collaboration agreement are no longer to be included in the Fuels JV, but that the parties will explore potential development and commercialization of such products at a later date.

The agreements contemplate that the research and development efforts under the Program may extend through 2016, with a series of "Go/No Go" decisions by Total through such date tied to funding by Total. Each funding tranche involves the issuance of senior unsecured convertible promissory notes by the Company to Total (see Note 5, "Debt"). The agreements provided for cash funding by Total of $15.0 million in July 2012 and an additional $15.0 million in September 2012. Such funding occurred in July and September as contemplated by the agreements. Further, Total funded $30.0 million in July 2013, and, if it chooses to proceed with the Program, will fund an additional $10.85 million in July 2014 and $10.85 million in January 2015 (referred to as the Third Closing). Thirty days following the earlier of the completion of the research and development program or December 31, 2016, Total has a final opportunity to decide whether or not to proceed with the Program.

At either of the decision points tied to the funding described above (in July 2013 or July 2014), if Total decides not to continue to fund the Program (or, at any funding date does not provide funding based on (i) the Company's failure to satisfy a closing condition under the purchase agreement for the notes, or (ii) Total's breach of the purchase agreement), the notes previously issued under the purchase agreement would remain outstanding and become payable by the Company at the maturity date in March 2017, the Program and associated agreements would terminate, all Company rights granted for use in farnesene-based diesel and farnesene-based jet fuel would revert to the Company, and no Fuels JV would be formed to commercialize the Fuels JV products.

In the final "Go/No Go" decision described above, Total may elect to (i) go forward with the full Program (diesel and jet fuel) (a "Go" decision), (ii) not continue its participation in the full Program, or (iii) go forward only with the jet fuel component of the Program, with the following outcomes:

- For a "Go" decision by Total with respect to the whole Program, the parties would form the Fuels JV and the notes would be cancelled.
- For a "No-Go" decision by Total with respect to the whole Program, the consequences would be as described in the paragraph above regarding a decision by Total not to continue to fund the Program.
- For a decision by Total to proceed with the jet fuel component of the Program and not the diesel component of the Program, 70% of the principal amount outstanding under the notes would remain outstanding and become payable by the Company and 30% of the outstanding principal of such notes would be cancelled, the diesel product would no longer be included in the collaboration, the Fuels JV would not receive rights to products for use in diesel fuels, and the Fuels JV would be formed by the parties to commercialize products for use in jet fuels.

The agreements contemplate that the parties will finalize the structure for the Fuels JV as set forth in the agreements and that the Fuels JV, if and when it is formed, would, subject to the conditions described below and absent other agreement, be owned equally (50%/50%) by the Company and Total. Under the agreements, the parties will, prior to the projected completion date, enter into a shareholders' agreement governing the Fuels JV, agree on the budget and business plan for the Fuels JV, and form the Fuels JV. In addition, following a final "Go" decision, the parties would enter into the Fuels JV license agreements, contribution agreements and other agreements required to establish the Fuels JV and enable it to operate.

Within thirty days prior to the final "Go" decision, Total may declare a "deadlock" if the parties fail to come to agreement on various matters relating to the formation of the Fuels JV, at which point Total may (i) elect to declare a "No-Go" decision, which has the consequences described above, or (ii) initiate a process whereby the fair value of the proposed Fuels JV would be determined and the Company would then have the option to: (i) elect to sell to Total the assets that the Company would have been required to contribute to the Fuels JV for an amount equal to 50% of such fair value; (ii) proceed with the formation of the Fuels JV (accepting Total's position with respect to the funding requirement of the Fuels JV) and becoming a 50% owner of the Fuels JV; or (iii) proceed with the formation of the Fuels JV (accepting Total's position with respect to the funding requirements of the Fuels JV), and then sell all or a portion of its 50% interest in the Fuels JV to Total for a price equal to the fair value multiplied by the percentage ownership of the Fuels JV sold to Total.

The agreements provide that the Company would initially retain its ability to develop its diesel and jet fuel business in Brazil, and that Total has an option to require the Company to contribute its Brazil diesel and jet fuel business to the Fuels JV at a price determined pursuant to the agreements. Such option terminates if the Fuels JV is not formed or if Total subsequently buys out the Company's Fuels JV contribution. Furthermore, the option is limited to the jet fuel business if Total opts out of the diesel component of the Program as described above.

Under the agreements, Total has a right to participate in future equity or convertible debt financings of the Company through December 31, 2013 to preserve its pro rata ownership of the Company and thereafter in limited circumstances. The purchase price for the first $30.0 million of purchases under this pro rata right would be paid by cancellation of outstanding notes held by Total.

In connection with the purchase agreement and sale of the Notes, the Company entered into a registration rights agreement. Under such agreement, the Company is obligated to file a registration statement on Form S-3 with the SEC registering the resale of all of the shares of the Company's common stock issuable upon conversion of the notes within twenty days prior to the maturity date of the notes or within 30 days following optional conversion. In addition, the Company is obligated to have the registration statement declared effective within 70-100 days following the filing depending on whether the Company receives comments from the SEC. If the registration statement filing is delayed or the registration statement is not declared effective within the foregoing time frames, the Company is required to make certain monthly payments to the Total.

As a result, $46.5 million of payments received from Total that had been recorded as an advance from the collaborator were no longer contingently repayable. Of this amount, $23.3 million was treated as a repayment by the Company and included as part of the senior unsecured convertible promissory note issued to Total in July 2012 and the remaining $23.2 million was recorded as a contract to perform research and development services, which was offset by the reduction of the capitalized deferred charge asset of $14.4 million resulting in the Company recording revenue from a related party of $8.9 million.

In December 2012, Total elected to participate in a private placement of the Company's common stock by exchanging approximately $5.0 million of its $53.3 million in senior unsecured convertible promissory notes into 1,677,852 shares of the Company's common stock at $2.98 per share. As such, $5.0 million of the outstanding $53.3 million in senior unsecured convertible debt was cancelled.

In March 2013, the Company entered into the March 2013 Letter Agreement under which Total agreed to waive its right and to cease its participation in the fuels collaboration at the July 2013 decision point and committed to proceed with the July 2013 funding tranche of $30.0 million (subject to the Company's satisfaction of the relevant closing conditions for such funding in the Total Purchase Agreement). As consideration for this waiver and commitment, the Company agreed to:

- Reduce the conversion price for the senior unsecured convertible promissory notes to be issued in connection with such funding from $7.0682 per share to a price per share equal to the greater of (i) the consolidated closing bid price of the Company's common stock on the date of the letter agreement, plus $0.01, and (ii) $3.08 per share, provided that the conversion price would not be reduced by more than the maximum possible amount permitted under the rules of NASDAQ such that the new conversion price would require the Company to obtain stockholder consent; and

- Grant Total a senior security interest in the Company's intellectual property, subject to certain exclusions and subject to release by Total when the Company and Total enter into final documentation regarding the establishment of the Fuels JV.

In addition to the waiver by Total described above, Total also agreed that, at the Company's request and contingent upon the Company meeting its obligations described above, it would pay advance installments of the amounts otherwise payable at the July 2013 closing. Specifically, if the Company requested such advance installments, subject to certain closing conditions and delivery of certifications regarding the Company's cash levels, Total was obligated to fund $10.0 million no later than May 15, 2013, and an additional $10.0 million no later than June 15, 2013, with the remainder to be funded on the original July 2013 closing date.

In June 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $10.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above. In accordance with the March 2013 Letter Agreement, this convertible note has an initial conversion price equal to $3.08 per share of the Company's common stock. The Company did not request the May advance of $10.0 million, but did request the June advance (as described above), under which this convertible note was issued (see Note 5, "Debt").

In July 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $20.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above (see Note 5, "Debt"). This purchase and sale completed Total's commitment to purchase $30.0 million of such notes by July 2013. In accordance with the March 2013 Letter Agreement, this convertible note has an initial conversion price equal to $3.08 per share of Company common stock.

The conversion prices of the notes issued under the Total Purchase Agreement are subject to adjustment for proportional adjustments to outstanding common stock and under anti-dilution provisions in case of certain dividends and distributions. Total has a right to require repayment of 101% of the principal amount of the notes in the event of a change of control of the Company and the notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment. The purchase agreement and notes include covenants regarding payment of interest, maintenance of the Company's listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the purchase agreement and notes, with added default interest rates and associated cure periods applicable to the covenant regarding SEC reporting. Furthermore, the notes include restrictions on the amount of debt the Company is permitted to incur. With exceptions for certain existing debt, refinancing of such debt and certain other exclusions and waivers, the notes provide that the Company's total outstanding debt at any time cannot exceed the greater of $200.0 million or 50% of its consolidated total assets and its secured debt cannot exceed the greater of $125.0 million or 30% of its consolidated total assets. In connection with the Company's closing of a short-term bridge loan for $35.0 million in October 2013, Total waived compliance with the debt limitations outlined above as to the $35.0 million bridge loan and the August 2013 Financing.

In connection with the August 2013 Financing, the Company entered into the August 2013 SPA (see Note 1, "The Company" and Note 5, "Debt") with Total and Temasek to sell up to $73.0 million in convertible promissory notes in private placements, with such notes to be sold and issued over a period of up to 24 months from the date of signing. The August 2013 SPA provided for the August 2013 Financing to be divided into two tranches (the first tranche for $42.6 million and the second tranche for $30.4 million), each with differing closing conditions. Of the total possible purchase price in the financing, $60.0 million to be paid in the form of cash by Temasek ($35.0 million in the first tranche and up to $25.0 million in the second tranche) and $13.0 million to be paid by the exchange and cancellation of outstanding convertible promissory notes held by Total in connection with its exercise of pro rata rights ($7.6 million in the first tranche and $5.4 million in the second tranche). The August 2013 SPA included requirements that the Company meet certain production milestones before the second tranche would become available, obtain stockholder approval prior to completing any closing of the transaction, and issue a warrant to Temasek to purchase 1,000,000 shares of the Company's common stock at an exercise price of $0.01 per share, exercisable only if Total converts preexisting promissory notes with a certain per share conversion price. In September 2013, the Company's stockholders approved the August 2013 Financing.

In October 2013, the Company amended the August 2013 SPA (referred to as the Amendment No. 1 to SPA) (see Note 1, "The Company") to include Fidelity Entities in the Tranche I Notes in the principal amount of $7.6 million, and to proportionally increase the amount acquired by exchange and cancellation of outstanding convertible notes held by Total through pro rata rights to $14.6 million ($9.2 million in the Tranche I and up to $5.4 million in the Tranche II). Also in October 2013, the Company completed the closing of the first tranche of the August 2013 Financing, issuing a total of $51.8 million in convertible promissory notes (the "Tranche I Notes") for cash proceeds of $7.6 million and cancellation of outstanding convertible promissory notes of $44.2 million, of which $35.0 million resulted from cancellation of the Temasek Bridge Note (see Note 5, "Debt"). The Tranche I Notes are due sixty months from the date of issuance and will be convertible into the Company's common stock at a conversion price equal to $2.44, subject to adjustment as described below. The Tranche I Notes are convertible at the option of the holder: (i) at any time after 18 months from the date of the August 2013 SPA, (ii) on a change of control of the Company and (iii) upon the occurrence of an event of default. The conversion price of the Tranche I Notes will be reduced to $2.15 if a specified Company manufacturing plant fails to achieve a total production of 1.0 million liters within a run period of 45 days prior to June 30, 2014, the Company fails to achieve gross margins from product sales of at least 5% prior to June 30, 2014, or the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes. If either of the production and margin milestones occur, and in addition, the Company reduces the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the Tranche I Notes, the conversion price of the Tranche I Notes will be reduced to $1.87. Each Tranche I Note accrues interest from the date of issuance until the earlier of the date that such Tranche I Note is converted into the Company's common stock or is repaid in full. Interest accrues at a rate of 5% per six months, compounded semiannually (with graduated interest rates of 6.5% applicable to the first 180 days and 8% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at 6.5% for all other defaults). Interest for the first 30 months is payable in kind and added to the principal every six-months and thereafter, the Company may continue to pay interest in kind by adding to the principal every six-months or may elect to pay interest in cash. The Tranche I Notes may be prepaid by the Company after 30 months from the issuance date and initial interest payment; thereafter the Company has the option to prepay the Tranche I Notes every six months at the date of payment of the semi-annual coupon.

The convertible promissory notes issuable in the second tranche of the August 2013 Financing (referred to as the Tranche II Notes) would be due 5 years after the date of the issuance of the first Tranche II Notes and would be subject to a conversion price equal to $2.87, subject to adjustment as described below. Specifically, the Tranche II Notes would be convertible at the option of the holder (i) at any time 12 months after issuance, (ii) on a change of control of the Company, and (iii) upon the occurrence of an event of default. Each Tranche II Notes will accrue interest from the date of issuance until the earlier of the date that such Tranche II Notes is converted into the Company's common stock or repaid in full. Interest will accrue at a rate per annum equal to 10% , compounded annually (with graduated interest rates of 13% applicable to the first 180 days and 16% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at a rate equal to 12% for all other defaults). Interest for the first 36 months shall be payable in kind and added to the principal every year following the issue date and thereafter, the Company may continue to pay interest in kind by adding to the principal on every year anniversary of the issue date or may elect to pay interest in cash.

In addition to the conversion price adjustments set forth above, the conversion prices of the Tranche I Notes and Tranche II Notes are subject to further adjustment (i) according to proportional adjustments to outstanding common stock of the Company in case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to notes held by any purchaser other than Total, in the event that Total exchanges existing convertible notes for new securities of the Company in connection with future financing transactions in excess of its pro rata amount. Notwithstanding the foregoing, holders of a majority of the principal amount of the notes outstanding at the time of conversion may waive any anti-dilution adjustments to the conversion price. The purchasers have a right to require repayment of 101% of the principal amount of the notes in the event of a change of control of the Company and the notes provide for payment of unpaid interest on conversion following such a change of control if the purchasers do not require such repayment. The August 2013 SPA, Tranche I Notes and Tranche II Notes include covenants regarding payment of interest, maintenance of the Company's listing status, limitations on debt and on certain liens, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the August 2013 SPA, Tranche I Notes and Tranche II Notes, with default interest rates and associated cure periods applicable to the covenant.

In December 2013, the Company executed the JV Documents among Amyris, Total and JVCO relating to the establishment of the JVCO (see Note 7, "Joint Venture and Noncontrolling Interest"), Amyris has agreed to (i) exchange the $69.0 million outstanding Total 1.5% Senior Unsecured Convertible Note and issue a replacement 1.5% senior secured convertible notes, in principal amounts equal to the principal amount of each cancelled note (the "Replacement Notes") and (ii) to grant to Total a security interest in and lien on all Amyris' rights, title and interest in and to Amyris' shares in the capital of the JVCO. Any Securities to be purchased and sold at the Third Closing by Total shall be 1.5% senior secured convertible notes shall have a conversion price of $7.0682. As a consequence of executing the JV Documents and forming JVCO, the Second Amendment of the August 2013 SPA and Restated Intellectual Property Security Agreement dated as of October 16, 2013, executed by Amyris in favor of Total, Temasek, and certain entities affiliated with Fidelity Investments, under which the Company granted a security interest in all of Amyris' intellectual property was automatically terminated effective as of December 2, 2013 upon Total's and the Company's joint written notice to Temasek. Also, in December 2013, Amyris and Total executed the Amended and Restated Master Framework Agreement which amends and restates the Master Framework Agreement dated July 30, 2012 and amended on March 24, 2013.

In December 2013, the Company, Total, Temasek, Fidelity Entities and Wolverine amended the August 2013 SPA and Amendment No. 1 to SPA (referred to as Amendment No. 2 to SPA). Under the Amendment No. 2 to the SPA the Company placed a $3.0 million of senior unsecured convertible notes under the second tranche of August 2013 Financing to funds affiliated with Wolverine Asset Management and elected to call $25.0 million in additional funds from Temasek pursuant to its previous commitment to purchase such amount of convertible promissory notes in the second tranche. Additionally, the Company agreed to sell approximately $6.0 million of convertible promissory notes in the second tranche to Total through cancellation of the same amount of principal of previously outstanding convertible notes held by Total (in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation. The second tranche funding closed in the first quarter of 2014.

Collaboration Partner Joint Development and License Agreement

In April 2013, the Company entered into a joint development and license agreement with a collaboration partner. Under the terms of the multi-year agreement, the collaboration partner and the Company will jointly develop certain fragrance ingredients. The collaboration partner will have exclusive rights to these fragrance ingredients for applications in the flavors and fragrances field, and the Company will have exclusive rights in other fields. The collaboration partner and the Company will share in the economic value derived from these ingredients. The joint development and license agreement provided for up to $6.0 million in funding based upon the achievement of certain technical milestones which are considered substantive by the Company during the first phase of the collaboration. For the year ended December 31, 2013, the Company recorded $6.0 million of revenue from the joint development and license agreement with the collaboration partner. As of December 31, 2013, $1.5 million was recorded in deferred revenue.

Collaboration Partner Master Collaboration and Joint Development Agreement

In November 2010, the Company entered into a Master Collaboration and Joint Development Agreement with a collaboration partner. Under the agreements, the collaboration partner will fund technical development at the Company to produce an ingredient for the flavors and fragrances (or F&F) market. The Company will manufacture the ingredient and the collaboration partner will market it, and the parties will share in any resulting economic value. The agreement also grants exclusive worldwide F&F commercialization rights to the collaboration partner for the ingredient. Under further agreements, the collaboration partner has an option to collaborate with the Company to develop additional ingredients. These agreements continue in effect until the later of the expiration or termination of the development agreements or the supply agreements. The Company is also eligible to receive potential total payments of $6.0 million upon the achievement of certain performance milestones towards which the Company will be required to make a contributory performance. These milestones are accounted for under the guidance in the FASB accounting standard update related to revenue recognition under the milestone method. The Company concluded that these milestone payments are substantive.

In March 2013, the Company entered into a Master Collaboration Agreement with the collaboration partner to establish a collaboration for the development and commercialization of multiple renewable F&F compounds. Under this agreement, except for rights granted under preexisting collaboration relationships, the Company granted the collaboration partner exclusive access for such compounds to specified Company intellectual property for the development and commercialization of F&F products in exchange for research and development funding and a profit sharing arrangement. The agreement superseded and expand the prior collaboration agreement between the Company and collaboration partner.

The agreement provides annual, up-front funding to the Company by the collaboration partner of $10.0 million for each of the first three years of the collaboration. The initial payment of $10.0 million was received by the Company on March 2013. The agreement contemplates additional funding by the collaboration partner of up to $5.0 million under three potential milestone payments, as well as additional funding by the collaboration partner on a discretionary basis.

In addition, the agreement contemplates that the parties will mutually agree on a supply price for each compound and share product margins from sales of each compound on a 70/30 basis (70% for the collaboration partner) until the collaboration partner receives $15.0 million more than the Company in the aggregate, after which the parties will share 50/50 in the product margins on all compounds. The Company also agreed to pay a one-time success bonus of up to $2.5 million to the collaboration partner's for outperforming certain commercialization targets. The collaboration partner eligibility to receive the one-time success bonus commences upon the first sale of the collaboration partner's product.

The agreement does not impose any specific research and development commitments on either party after year six, but if the parties mutually agree to perform development after year six, the agreement provides that the parties will fund it equally.

Under the agreement, the parties jointly select target compounds, subject to final approval of compound specifications by the collaboration partner. During the development phase, the Company is required to provide labor, intellectual property and technology infrastructure and the collaboration partner is required to contribute downstream polishing expertise and market access. The agreement provides that the Company will own research and development and strain engineering intellectual property, and the collaboration partner will own blending and, if applicable, chemical conversion intellectual property. Under certain circumstances such as the Company's insolvency, the collaboration partner gains expanded access to the Company's intellectual property. Following development of F&F compounds under the agreement, the agreement contemplates that Company will manufacture the initial target molecules for the compounds and the collaboration partner will perform any required downstream polishing and distribution, sales and marketing.

For the years ended December 31, 2013, 2012 and 2011 the Company recorded $8.2 million, $4.8 million and $5.2 million, respectively, of revenue from the collaboration agreement with the collaboration partner.

Michelin Collaboration Agreement

In September 2011, the Company entered into a collaboration agreement with Manufacture Francaise des Pneumatiques Michelin ("Michelin"). Under the terms of the collaboration agreement, the Company and Michelin will collaborate on the development, production and worldwide commercialization of isoprene or isoprenol, generally for tire applications, using the Company's technology. Under the agreement, Michelin has agreed to pay an upfront payment to the Company of $5.0 million, subject to a reimbursement provision under which the Company would have to repay $1.0 million if it fails to achieve specified future technical milestones. The agreement provides that, subject to achievement of technical milestones, Michelin can notify the Company of its desired date for initial delivery, and the parties will either collaborate to establish a production facility or use an existing Company facility for production. The agreement also includes a term sheet for a supply agreement that would be negotiated at the time the decision regarding production facilities is made. The agreement has an initial term that will expire upon the earlier of 42 months from the effective date and the completion of a development work plan. As of December 31, 2013, the Company recorded the upfront payment of $5.0 million from Michelin as deferred revenue.

Manufacturing Agreements

The Company entered into contract manufacturing agreements with various contract manufacturing partners to utilize their manufacturing facilities to produce Amyris products.

In March 2012, the Company initiated a plan to shift a portion of its production capacity from contract manufacturing facilities to a Company-owned plant that was then under construction. As a result, the Company evaluated its contract manufacturing agreements and recorded a loss of $31.2 million related to the write-off of $10.0 million in facility modification costs and the recognition of $21.2 million of fixed purchase commitments in the three months ended March 31, 2012. The Company recognized an additional charge of $1.4 million and $7.8 million, respectively, in the third and fourth quarters of 2012 associated with loss on fixed purchase commitments. The Company computed the loss on facility modification costs and fixed purchase commitments using the same lower of cost or market approach that is used to value inventory. The computation of the loss on fixed purchase commitments is subject to several estimates, including cost to complete and the ultimate selling price of any Company products manufactured at the relevant production facilities, and is therefore inherently uncertain. The Company also recorded a loss on write-off of production assets of $5.5 million related to Amyris-owned production equipment at contract manufacturing facilities in the quarter ended March 31, 2012.

Total loss on purchase commitments and write-off of production assets for the year ended December 31, 2013 was $9.4 million. The Company will continue to evaluate the potential for losses in future periods based on updated production and sales price assumptions.

Tate & Lyle

In November 2010, the Company entered into a Contract Manufacturing Agreement (referred to as the Contract Manufacturing Agreement) with Tate & Lyle Ingredients Americas, Inc. (or Tate & Lyle), an affiliate of Tate & Lyle PLC. Tate & Lyle commenced production operations in the fourth quarter of 2011. At December 31, 2013 and 2012, the Company has recorded zero and $0.8 million, respectively, in prepaid and other current assets and zero and $2.2 million, respectively, in other noncurrent assets pertaining to the unamortized portion of equipment costs funded by the Company to Tate & Lyle (see Note 4, "Balance Sheet Components"). The related amortization is being offset against purchases of inventory from this contract manufacturer.

The Contract Manufacturing Agreement had secured manufacturing capacity for farnesene through 2016 at Tate & Lyle's facility in Decatur, Illinois. The Contract Manufacturing Agreement included a base monthly payment and a variable payment based on production volume at the Tate & Lyle facility. With the Company's commencement of production at its farnesene facility located in Brazil, the Company determined that the Contract Manufacturing Agreement was no longer desired from a cost and operational perspective. The Company had no production at the Tate & Lyle facility since the first quarter of 2013.

In June 2013, the Company and Tate & Lyle entered into a Termination Agreement to terminate the parties' November 2010 Contract Manufacturing Agreement. The Termination Agreement resolves all outstanding issues that had arisen in connection with the Company's relationship with Tate & Lyle.

Pursuant to the Termination Agreement, the Company is required to make four payments to Tate & Lyle, totaling approximately $8.8 million, of which $3.6 million is to satisfy outstanding obligations and $5.2 million is in lieu of additional payments otherwise owed under the Contract Manufacturing Agreement. These four payments are due under the Termination Agreement between July 17, 2013 and December 16, 2013, and are deemed to be in full satisfaction of all amounts otherwise owed under the Contract Manufacturing Agreement. Under the Termination Agreement, no further payments will be owed for the remaining term of the Contract Manufacturing Agreement (i.e., through 2016). As a result, the Company recorded a loss of $8.4 million which is included in the loss on purchase commitments and write-off of production assets and consisted of an impairment charge of $6.7 million relating to Company-owned equipment at the Tate & Lyle facility, a $2.7 million write off of an unamortized portion of equipment costs funded by the Company for Tate & Lyle, offset by a reversal of $1.0 million provision for loss on fixed purchase commitments. As of December 31, 2013, the Company had no outstanding liability under the Termination Agreement.

Paraíso Bioenergia

In March 2011, the Company entered into a supply agreement with Paraíso Bioenergia, a renewable energy company producing sugar, ethanol and electricity headquartered in São Paulo State, Brazil. Under the agreement, the Company constructed a fermentation and separation capacity to produce its products and Paraíso Bioenergia provides supply of sugar cane juice and other utilities. The Company retains the full economic benefits enabled by the sale of Amyris renewable products over the lower of sugar or ethanol alternatives. In conjunction with the supply agreement, the Company also entered into an operating lease on a land owned by Paraíso Bioenergia. The real property is being used by the Company for its production site in Brotas, Brazil.

Per the terms of the supply agreement, in the event that Paraíso is presented with an offer to sell or decides to sell the real property, the Company has the right of first refusal to acquire it. If the Company fails to exercise its right of first refusal the purchaser of the real property will need to comply with the specific obligations of Paraíso Bioenergia to the Company under the lease agreement.

Albemarle

In July 2011, the Company entered into a contract manufacturing agreement with Albemarle Corporation (or Albemarle), which will provide toll manufacturing services at its facility in Orangeburg, South Carolina. Under this agreement, Albemarle will manufacture lubricant base oils from Biofene, which will be owned and distributed by the Company or a Company-designated commercial partner. The initial term of this agreement is from July 31, 2011 through December 31, 2012. Albemarle is required to modify its facility, including installation and qualification of equipment and instruments necessary to perform the toll manufacturing services under the agreement. The Company reimbursed Albemarle $10.0 million for all capital expenditures related to the facility modification, which was accounted for as a prepaid asset. All equipment or facility modifications acquired or made by Albemarle will be owned by Albemarle, subject to Albemarle's obligation to transfer title to, and ownership of, certain assets to the Company within 30 days after termination of the agreement, at the Company's discretion and sole expense. In March 2012, the Company recorded a loss of $7.8 million related to the write-off of the facility modification costs, described above.

In addition, the Company paid a one-time, non-refundable performance bonus of $5.0 million if Albemarle delivers to the Company certain quantity of the lubricant base stock by December 31, 2011 or $2.0 million if Albemarle delivers the same quantity by January 31, 2012. Based on Albermarle's performance as of December 31, 2011, the Company concluded that Albermarle had earned the bonus which is payable in two payments. The Company paid Albemarle $2.5 million during the year ended December 31, 2012 and $2.5 million during the year ended December 31, 2013.

In February 2012, the Company entered into an amended and restated agreement with Albemarle, which superseded the original contract manufacturing agreement with Albemarle. The term of the new agreement continues through December 31, 2019. The agreement includes certain obligations for the Company to pay fixed costs totaling $7.5 million, of which $3.5 million and $4.0 million are payable in 2012 and 2014, respectively. In the three months ended March 31, 2012, the Company recorded a corresponding loss related to these fixed purchase commitments, as described above. As of December 31, 2013, the Company have a $4.0 million outstanding liability payable to Albermarle.

9. Goodwill and Intangible Assets

The following table presents the components of the Company's intangible assets (in thousands):

		December 31, 2013			December 31, 2012		
	Useful Life in Years	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
In-process research and development	Indefinite	$ 8,560	$ —	$ 8,560	$ 8,560	$ —	$ 8,560
Acquired licenses and permits	2	772	(772)	—	772	(740)	32
Goodwill	Indefinite	560	—	560	560	—	560
		$ 9,892	$ (772)	$ 9,120	$ 9,892	$ (740)	$ 9,152

The following table presents the activity of intangible assets for the year ended December 31, 2013 (in thousands):

	December 31, 2012				December 31, 2013
	Net Carrying Value	Additions	Adjustments	Amortization	Net Carrying Value
In-process research and development	$ 8,560	$ —	$ —	$ —	$ 8,560
Acquired licenses and permits	32	—	—	(32)	—
Goodwill	560	—	—	—	560
	$ 9,152	$ —	$ —	$ (32)	$ 9,120

The intangible assets acquired through the Draths Corporation acquisition in October 2011 of in-process research and development of $8.6 million and goodwill of $0.6 million are treated as indefinite lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written-off, as appropriate. If the carrying amount of the assets is greater than the measures of fair value, impairment is considered to have occurred and a write-down of the asset is recorded. Any finding that the value of its intangible assets has been impaired would require the Company to write-down the impaired portion, which could reduce the value of its assets and reduce (increase) its net income (loss) for the year in which the related impairment charges occur. As of December 31, 2013 and 2012, no impairment of the goodwill and intangible assets was recorded.

Acquired licenses and permits are amortized using a straight-line method over its estimated useful life. Amortization expense for this intangible was $32,170, $0.4 million and $0.4 million for the year ended December 31, 2013, 2012 and 2011, respectively. As of December 31, 2013, acquired licenses and permits were fully amortized.

10. Stockholders' Equity

Private Placement

February 2012 Private Placement

In February 2012, the Company completed a private placement of 10,160,325 shares of its common stock at a price of $5.78 per share for aggregate proceeds of $58.7 million. In connection with this private placement, the Company entered into an agreement with an investor to purchase additional shares of the Company's Common Stock for an additional $15.0 million by March 2013 upon satisfaction by the

Company of criteria associated with the commissioning of the Company's production plant in Brotas, Brazil. This additional investment provided by the investor through a $10.0 million investment in a private placement completed by the Company in December 2012 and subsequently, through a $5.0 million investment in a private placement completed by the Company in March 2013.

May 2012 Private Placement

In May 2012, the Company completed a private placement of 1,736,100 shares of it's common stock at a price of $2.36 per share for aggregate proceeds of $4.1 million.

December 2012 Private Placement

In December 2012, the Company completed a private placement of 14,177,849 shares of its common stock at a price of $2.98 per share for aggregate proceeds of $37.2 million and the cancellation of $5.0 million worth of outstanding senior unsecured convertible promissory notes previously issued to Total by the Company. The Company issued 1,677,852 shares to Total in exchange for this note cancellation. Net cash received for this private placement as of December 31, 2012 was $22.2 million and the remaining $15.0 million of proceeds was received in January 2013. In connection with this, the Company entered into a letter of agreement with an investor under which the Company acknowledged that the investor's initial investment of $10.0 million in December 2012 represented partial satisfaction of the investor's preexisting contractual obligation to fund $15.0 million by March 31, 2013 upon satisfaction by the Company of criteria associated with the commissioning of the Company's production plant in Brotas, Brazil.

In January 2013, the Company received $15.0 million in proceeds from the private placement offering that closed in December 2012. Consequently, the Company issued 5,033,557 shares of the 14,177,849 shares of the Company's common stock .

March 2013 Private Placement

In March 2013, the Company completed a private placement of 1,533,742 shares of its common stock at a price of $3.26 per share for aggregate proceeds of $5.0 million. This private placement represented the final tranche of an investor's preexisting contractual obligation to fund $15.0 million upon satisfaction by the Company of certain criteria associated with the commissioning of a production plant in Brotas, Brazil.

Evergreen Shares for 2010 Equity Plan and 2010 ESPP

In January 2013, the Company's Board of Directors (or Board) approved an increase to the number of shares available for issuance under the Company's 2010 Equity Incentive Plan (or Equity Plan) and the 2010 Employee Stock Purchase Plan (or ESPP). These shares represent an automatic annual increase in the number of shares available for issuance under the Equity Plan and the ESPP of 3,435,483 and 687,096, respectively, equal to 5% and 1%, respectively of 68,709,660 shares, the total outstanding shares of the Company's common stock as of December 31, 2012. This automatic increase was effective as of January 1, 2013. Shares available for issuance under the Equity Plan and ESPP were initially registered on a registration statement on Form S-8 filed with the Securities and Exchange Commission on October 1, 2010 (Registration No. 333-169715). The Company filed registration statements on Form S-8 on March 28, 2013 and May 20, 2013 with respect to the shares added by the automatic increase on January 1, 2013.

Common Stock

As of December 31, 2012, the Company was authorized to issue 100,000,000 shares of common stock pursuant to the Company's amended and restated certificate of incorporation. On May 9, 2013, the Company amended and restated its certificate of incorporation and increased its authorized number of shares of common stock to 200,000,000. Holders of the Company's common stock are entitled to dividends as and when declared by the Board of Directors, subject to the rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date. The holder of each share of common stock is entitled to one vote.

Preferred Stock

Pursuant to the Company's amended and restated certificate of incorporation, the Company is authorized to issue 5,000,000 shares of preferred stock. The Board of Directors has the authority, without action by its stockholders, to designate and issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. Prior to the closing of the Company's IPO, the Company had four series of convertible preferred stock outstanding, including Series D preferred stock issued to Total (see Note 8, "Significant Agreements"). As of December 31, 2013 and December 31, 2012, the Company had zero convertible preferred stock outstanding.

Common Stock Warrants

In December 2011, in connection with a capital lease agreement, the Company issued warrants to purchase 21,087 shares of the Company's common stock at an exercise price of $10.67 per share. The Company estimated the fair value of these warrants as of the issuance date to be $0.2 million and recorded these warrants as other assets and were amortized subsequently over the term of the lease. The fair value was based on the contractual term of the warrants of 10 years, risk free interest rate of 2%, expected volatility of 86% and zero expected dividend yield. These warrants remain unexercised and outstanding as of December 31, 2013.

In October 2013, in connection with the issuance of the Temasek Tranche I convertible promissory notes (see Note 5, "Debt"), the Company issued contingently exercisable warrants to purchase 1,000,000 shares of the Company's common stock at an exercise price of $0.01 per share. The Company estimated the fair value of these warrants as of the issuance date at $1.3 million and recorded these warrants as debt issuance cost to be amortized over the term of the note. The fair-value was calculated using a Monte Carlo simulation valuation model based on the contractual term of the warrants of 3.4 years, risk free interest rate of 0.77%, expected volatility of 45% and zero expected dividend yield. These warrants remain unexercised and outstanding as of December 31, 2013.

Each of these warrants includes a cashless exercise provision which permits the holder of the warrant to elect to exercise the warrant without paying the cash exercise price, and receive a number of shares determined by multiplying (i) the number of shares for which the warrant is being exercised by (ii) the difference between the fair market value of the stock on the date of exercise and the warrant exercise price, and dividing such by (iii) the fair market value of the stock on the date of exercise. During the years ended December 31, 2013 and 2012, no warrants were exercised through the cashless exercise provision.

As of December 31, 2013 and 2012, the Company had 1,021,087 and 21,087 of unexercised common stock warrants, respectively.

11. Stock-Based Compensation Plans

2010 Equity Incentive Plan

The Company's 2010 Equity Incentive Plan (or 2010 Equity Plan) became effective on September 28, 2010 and will terminate in 2020. Pursuant to the 2010 Equity Plan, any shares of the Company's common stock (i) issued upon exercise of stock options granted under the Company's 2005 Stock Option/Stock Issuance Plan (or the 2005 Plan) that cease to be subject to such option and (ii) issued under the 2005 Plan that are forfeited or repurchased by the Company at the original purchase price will become part of the 2010 Equity Plan. Subsequent to the effective date of the 2010 Equity Plan, an additional 1,730,807 shares that were forfeited under the 2005 Plan were added to the shares reserved for issuance under the 2010 Equity Plan.

The number of shares reserved for issuance under the 2010 Equity Plan increase automatically on January 1st of each year starting with January 1, 2011, by a number of shares equal to 5% percent of the Company's total outstanding shares as of the immediately preceding December 31st. The Company's Board of Directors or the Leadership Development and Compensation Committee of the Board of Directors is able to reduce the amount of the increase in any particular year. The 2010 Equity Plan provides for the granting of common stock options, restricted stock awards, stock bonuses, stock appreciation rights, restricted stock units and performance awards. It allows for time-based or performance-based vesting for the awards. Options granted under the 2010 Equity Plan may be either incentive stock options (or ISOs) or non-statutory stock options (or NSOs). ISOs may be granted only to Company employees (including officers and directors who are also employees). NSOs may be granted to Company employees, non-employee directors and consultants. The Company will be able to issue no more than 30,000,000 shares pursuant to the grant of ISOs under the 2010 Equity Plan. Options under the 2010 Equity Plan may be granted for periods of up to ten years. All options issued to date have had a ten year life. Under the plan, the exercise price of any ISOs and NSOs may not be less than 100% of the fair market value of the shares on the date of grant. The exercise price of any ISOs and NSOs granted to a 10% stockholder may not be less than 110% of the fair value of the underlying stock on the date of grant. The options granted to date generally vest over four to five years.

As of December 31, 2013, options to purchase 6,334,836 shares of the Company's common stock granted from the 2010 Equity Plan were outstanding and 4,351,596 shares of the Company's common stock remained available for future awards that may be granted from the 2010 Equity Plan. The options outstanding as of December 31, 2013 had a weighted-average exercise price of approximately $7.04 per share.

2005 Stock Option/Stock Issuance Plan

In 2005, the Company established its 2005 Plan which provided for the granting of common stock options, restricted stock units, restricted stock and stock purchase rights awards to employees and consultants of the Company. The 2005 Plan allowed for time-based or performance-based vesting for the awards. Options granted under the 2005 Plan were ISOs or NSOs. ISOs were granted only to Company employees (including officers and directors who are also employees). NSOs were granted to Company employees, non-employee directors, and consultants.

All options issued under the 2005 Plan have had a ten year life. The exercise prices of ISOs and NSOs granted under the 2005 Plan were not less than 100% of the estimated fair value of the shares on the date of grant, as determined by the Board of Directors. The exercise price of an ISO and NSO granted to a 10% stockholder could not be less than 110% of the estimated fair value of the underlying stock on the date of grant as determined by the Board of Directors. The options generally vested over 5 years.

As of December 31, 2013, options to purchase 2,014,769 shares of the Company's common stock granted from the 2005 Stock Option/Stock Issuance Plan remained outstanding and, as a result of the adoption of the 2010 Equity Incentive Plan discussed above, zero shares of the Company's common stock remained available for issuance under the 2005 Plan. The options outstanding under the 2005 Plan as of December 31, 2013 had a weighted-average exercise price of approximately $8.59 per share.

No income tax benefit has been recognized relating to stock-based compensation expense and no tax benefits have been realized from exercised stock options or release of restricted stock units.

2010 Employee Stock Purchase Plan

The 2010 Employee Stock Purchase Plan (referred to as the 2010 ESPP) became effective on September 28, 2010. The 2010 ESPP is designed to enable eligible employees to purchase shares of the Company's common stock at a discount. Each offering period is for one year and consists of two six-month purchase periods. Each twelve-month offering period generally commences on May 16th and November 16th, each consisting of two six-month purchase periods. The purchase price for shares of common stock under the 2010 ESPP is the lesser of 85% of the fair market value of the Company's common stock on the first day of the applicable offering period or the last day of each purchase period. A total of 168,627 shares of common stock were initially reserved for future issuance under the 2010 Employee Stock Purchase Plan. During the first eight years of the life of the 2010 ESPP, the number of shares reserved for issuance increases automatically on January 1st of each year, starting with January 1, 2011, by a number of shares equal to 1% of the Company's total outstanding shares as of the immediately preceding December 31st. Pursuant to the automatic increase provision, an additional 687,096 shares were reserved for issuance during the year ended December 31, 2013 for a cumulative total of 1,584,895 additional shares reserved for issuance under the automatic increase provision. The Company's Board of Directors or the Leadership Development and Compensation Committee of the Board of Directors is able to reduce the amount of the increase in any particular year. No more than 10,000,000 shares of the Company's common stock may be issued under the 2010 ESPP and no other shares may be added to this plan without the approval of the Company's stockholders.

During the year ended December 31, 2013, 472,039 shares of the Company's common stock were purchased under the 2010 ESPP. At December 31, 2013, 401,757 shares of the Company's common stock remained available for issuance under the 2010 ESPP.

Stock Option Activity

The Company's stock option activity and related information for the year ended December 31, 2013 was as follows:

	Number Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Outstanding – December 31, 2012	8,946,592	$ 9.07	7.5	$ 954
Options granted	2,989,919	$ 2.82		
Options exercised	(305,060)	$ 1.89		
Options cancelled	(3,221,846)	$ 8.34		
Outstanding – December 31, 2013	8,409,605	$ 7.39	7.4	$ 12,393
Vested and expected to vest after December 31, 2013	7,879,704	$ 7.58	7.3	$ 11,290
Exercisable at December 31, 2013	3,999,486	$ 9.70	5.9	$ 3,822

The aggregate intrinsic value of options exercised under all option plans was $0.6 million, $2.7 million and $28.7 million for the years ended December 31, 2013, 2012 and 2011, respectively, determined as of the date of option exercise.

The Company's restricted stock units (or RSU) and restricted stock activity and related information for the year ended December 31, 2013 was as follows:

	RSUs	Weighted-Average Grant-Date Fair Value	Weighted Average Remaining Contractual Life (Years)
Outstanding – December 31, 2012	2,550,799	$ 7.92	1.3
Awarded	1,222,250	$ 2.85	—
Vested	(889,619)	$ 5.08	—
Forfeited	(566,993)	$ 3.57	—
Outstanding – December 31, 2013	2,316,437	$ 4.30	0.88
Expected to vest after December 31, 2013	2,121,306	$ 4.30	0.81

The following table summarizes information about stock options outstanding as of December 31, 2013:

	Options Outstanding			Options Exercisable	
Exercise Price	Number of Options	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Number of Options	Weighted-Average Exercise Price
$0.10 – $2.75	848,011	8.1	$ 2.54	189,629	$ 2.15
$2.76 – $2.79	1,046,855	8.1	$ 2.78	166,250	$ 2.76
$2.81 – $2.89	960,500	9.4	$ 2.87	137	$ 2.85
$2.94 – $3.23	892,138	9.0	$ 3.04	255,031	$ 3.07
$3.55 – $3.83	45,655	8.6	$ 3.57	42,402	$ 3.55
$3.86 – $3.86	967,500	8.0	$ 3.86	426,760	$ 3.86
$3.93 – $4.06	895,456	4.3	$ 3.94	835,039	$ 3.94
$4.31 – $11.20	854,569	5.8	$ 6.73	733,001	$ 6.39
$11.51 – $18.22	842,905	6.9	$ 16.08	577,767	$ 16.09
$19.61 – $30.17	1,056,016	6.8	$ 23.57	773,470	$ 23.38
$0.10 – $30.17	8,409,605	7.4	$ 7.39	3,999,486	$ 9.70

Stock-Based Compensation Expense

Stock-based compensation expense related to options and restricted stock units granted to employees and nonemployees was allocated to research and development expense and sales, general and administrative expense as follows (in thousands):

	Years Ended December 31,		
	2013	2012	2011
Research and development	$ 4,281	$ 6,451	$ 6,345
Sales, general and administrative	13,766	21,022	19,147
Total stock-based compensation expense	$ 18,047	$ 27,473	$ 25,492

Employee Stock-Based Compensation

During the years ended December 31, 2013, 2012 and 2011, the Company granted options to purchase 2,849,919 shares, 3,589,593 shares, and 2,677,249 shares of its common stock, respectively, to employees with weighted-average grant date fair values of $1.98, $2.28, and $18.41 per share, respectively. Compensation expense of $13.1 million, $20.2 million, and $19.2 million was recorded for the years ended December 31, 2013, 2012 and 2011, respectively, for stock-based options granted to employees. As of December 31, 2013, 2012 and 2011, there were unrecognized compensation costs of $15.0 million, $51.2 million, and $54.7 million, respectively, related to these stock options. The Company expects to recognize those costs over a weighted-average period of 2.7 years as of December 31, 2013. Future option grants will increase the amount of compensation expense to be recorded in these periods.

In August 2012, the Company's CEO exercised outstanding options to purchase 668,730 shares of the Company's common stock and sold the shares to certain members of the Company's Board of Directors or their affiliates through a private sale at a price of $3.70, which was greater than the fair market value of the stock at the date of sale. The Company recorded $0.4 million in stock-based compensation expense as an excess of the sale price over the fair market value of shares in this transaction during the year ended December 31, 2012.

During the years ended December 31, 2013, 2012 and 2011, 1,222,250, 2,956,900 and 352,301 of restricted stock units, respectively, were granted to employees with a weighted-average service-inception date fair value of $2.85, $3.46 and $29.85 per unit, respectively. The Company recognized a total of $4.1 million,

$6.3 million and $3.6 million, respectively, in December 31, 2013, 2012 and 2011 in stock-based compensation expense for restricted stock units granted to employees. As of December 31, 2013, 2012 and 2011, there were unrecognized compensation costs of $3.6 million, $7.8 million and $6.0 million, respectively, related to these restricted stock units.

During the years ended December 31, 2013, 2012 and 2011, the Company also recognized stock-based compensation expense related to its 2010 ESPP of $0.6 million, $0.8 million, and $1.9 million, respectively.

Compensation expense was recorded for stock-based awards granted to employees based on the grant date estimated fair value (in thousands):

	Years Ended December 31,		
	2013	2012	2011
Research and development	$ 4,278	$ 6,442	$ 6,306
Sales, general and administrative	13,453	20,887	18,288
Total stock-based compensation expense	$ 17,731	$ 27,329	$ 24,594

Employee stock-based compensation expense recognized for the years ended December 31, 2013 and 2012 included $1.0 million and $0.9 million, respectively, related to option modifications. As part of separation agreements with certain former senior employees, the Company agreed to accelerate the vesting of options for 458,424 and 825,523 shares of common stock and extend the exercise period for certain grants in the years ended December 31, 2013 and 2012, respectively. The stock-based compensation expense for the year ended December 31, 2012, includes the impact of a repricing of stock options in June 2012 under which certain non-executive employees received a one-time reduction in the exercise price for such options with per share exercise prices per share higher than $24.00 held by U.S. employees of Amyris and the new exercise price for such options was $16.00, the Company's initial public offering price. The total amount of the stock-based compensation associated with repricing was immaterial to the consolidated financial statements.

In the quarter ended June 30, 2011, the Company commenced sales of farnesene-derived products which were produced by contracted third parties. Accordingly, the Company did not have any dedicated production headcount so there is no stock-based compensation expense recorded in cost of products sold.

Stock-based compensation cost for RSUs is measured based on the closing fair market value of the Company's common stock on the date of grant. Stock-based compensation cost for stock options and employee stock purchase plan rights is estimated at the grant date and offering date, respectively, based on the fair-value using the Black-Scholes option pricing model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards. The fair value of employee stock options was estimated using the following weighted-average assumptions:

	Years Ended December 31,		
	2013	2012	2011
Expected dividend yield	—%	—%	—%
Risk-free interest rate	1.4%	1.1%	2.3%
Expected term (in years)	6.1	6.0	5.8
Expected volatility	82%	77%	86%

Expected Dividend Yield — The Company has never paid dividends and does not expect to pay dividends.

Risk-Free Interest Rate — The risk-free interest rate was based on the market yield currently available on United States Treasury securities with maturities approximately equal to the option's expected term.

Expected Term — Expected term represents the period that the Company's stock-based awards are expected to be outstanding. The Company's assumptions about the expected term have been based on that of companies that have similar industry, life cycle, revenue, and market capitalization and the historical data on employee exercises.

Expected Volatility — The expected volatility is based on a combination of historical volatility for the Company's stock and the historical stock volatilities of several of the Company's publicly listed comparable companies over a period equal to the expected terms of the options, as the Company does not have a long trading history.

Forfeiture Rate — The Company estimates its forfeiture rate based on an analysis of its actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior, and other factors. The impact from a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated by the Company, the Company may be required to record adjustments to stock-based compensation expense in future periods.

Each of the inputs discussed above is subjective and generally requires significant management and director judgment.

Nonemployee Stock-Based Compensation

During the years ended December 31, 2013, 2012 and 2011, the Company granted nonemployee options to purchase 140,000, 3,000 and 15,000 shares of its common stock, respectively, to nonemployees in exchange for services. Compensation expense of $0.1 million, $86,000 and $0.8 million was recorded for the years ended December 31, 2013, 2012 and 2011, respectively, for stock-based options granted to nonemployees. The nonemployee options were valued using the Black-Scholes option pricing model.

During the years ended December 31, 2013, 2012 and 2011, zero, 10,000 and 32,855 restricted stock units, respectively, were granted to nonemployees and a total of $0.1 million, $58,000 and $0.1 million, respectively, in stock-based compensation expense was recognized by the Company for the years ended December 31, 2013, 2012 and 2011.

The fair value of nonemployee stock options was estimated using the following weighted-average assumptions:

	Years Ended December 31,		
	2013	2012	2011
Expected dividend yield	—%	—%	—%
Risk-free interest rate	1.3%	1.4%	2.1%
Expected term (in years)	4.8	7.0	7.8
Expected volatility	81%	77%	86%

12. Employee Benefit Plan

The Company established a 401(k) Plan to provide tax deferred salary deductions for all eligible employees. Participants may make voluntary contributions to the 401(k) Plan up to 90% of their eligible compensation, limited by certain Internal Revenue Service restrictions. As of December 31, 2013 the Company does not match employee contributions.

13. Related Party Transactions

February 2012 Private Placement

In February 2012, the Company completed a private placement of 10,160,325 shares of its common stock at a price of $5.78 per share for aggregate proceeds of $58.7 million pursuant to a securities purchase agreement, among the Company and existing certain investors, including Total and Temasek, each a beneficial owner of more than 5% of the Company's existing common stock at the time of the transaction. In addition, members of the Board and certain parties related to such directors participated in the offering.

May 2012 Private Placement

In May 2012, the Company completed a private placement of 1,736,100 shares of it's common stock at a price of $2.36 per share for aggregate proceeds of $4.1 million pursuant to a series of Common Stock Purchase Agreements, among the Company and members of the Board and certain parties related to such directors.

March 2013 Private Placement

In March 2013, the Company completed a private placement of 1,533,742 shares of its common stock to an existing stockholder, Biolding Investment SA (or Biolding), at a price of $3.26 per share for aggregate proceeds of $5.0 million. This private placement represented the final tranche of Biolding's preexisting contractual obligation to fund $15.0 million upon satisfaction by the Company of certain criteria associated with the commissioning of a production plant in Brotas, Brazil.

Related Party Financings

In July 2012, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $38.3 million, including $15.0 million in new funds and repayment by Amyris of $23.3 million in previously-provided diesel research and development funding by Total with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above under "Related Party Convertible Notes" in Note 5, "Debt."

In September 2012, the Company sold and issued 1.5% Senior Unsecured Convertible Note to Total in the face amount of $15.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above under "Related Party Convertible Notes" in Note 5, "Debt."

In December 2012, in connection with the December 2012 private placement described in Note 10, "Stockholders Equity", Total elected to participate in the private placement by exchanging approximately $5.0 million of its $53.3 million in senior unsecured convertible promissory notes into 1,677,852 of the Company's common stock at $2.98 per share. As such, $5.0 million of the outstanding $53.3 million in senior unsecured convertible promissory notes was cancelled (see Note 5, "Debt").

In June 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $10.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above under "Related Party Convertible Notes" in Note 5, "Debt."

In July 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total in the face amount of $20.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed above under "Related Party Convertible Notes" in Note 5, "Debt."

In August 2013, the Company entered into a securities purchase agreement by and among the Company, Total and Temasek, each a beneficial owner of more than 5% of the Company's existing common stock at the time of the transaction, for a private placement of convertible promissory notes in an aggregate principal amount of $73.0 million (see Note 1, "The Company"). The initial closing of the August 2013 Financing was completed in October 2013 (see Note 5, "Debt").

In September 2013, the Company entered into a bridge loan agreement with an existing investor to provide additional cash availability of up to $5.0 million as needed before the initial closing of the August 2013 Financing. The Company did not use this facility and it expired in October 2013 in accordance with its terms.

In October 2013, the Company sold and issued a senior secured promissory note to Temasek for a bridge loan of $35.0 million. The note was due on February 2, 2014 and accrued interest at a rate of 5.5% each four months from October 4, 2013 (with a rate of 2% per month if a default occurred). The note was cancelled as payment for the investor's purchase of the first tranche convertible note in the August 2013 Financing. The note was cancelled on October 16, 2013 as payment for Temasek's purchase of the first tranche convertible note in the August 2013 Financing (see Note 5, "Debt").

In October 2013, the Company completed the closing of the first tranche of the August 2013 Financing, which resulted to the exchange and cancellation of the $35.0 million Temasek Bridge Note and the $9.2 million Total convertible note, as a result of the exchange and cancellation the Company recorded a loss from extinguishment of debt of $19.9 million (see Note 5, "Debt").

In December 2013, the Company agreed to exchange the $69.0 million outstanding Total unsecured convertible notes and issue a replacement 1.5% senior secured convertible notes, in principal amounts equal to the principal amount of each cancelled note (see Note 5, "Debt").

In December 2013, the Company agreed to issue to Temasek $25.0 million of the second tranche of convertible promissory notes for cash. Total purchased approximately $6.0 million of the the second tranche of convertible promissory notes through cancellation of the same amount of principal of previously outstanding convertible promissory notes held by Total (in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation). Such financing transactions closed in January 2014 (see Note 5, "Debt" and Note 16, "Subsequent Events").

As of December 31, 2013 and 2012, $89.5 million and $39.0 million, respectively, was outstanding under these convertible notes, net of debt discount of $27.9 million and $9.3 million, respectively. For the years ended December 31, 2013, 2012 and 2011, the Company recorded loss from extinguishment of debt from the exchange and cancellation of related party convertible notes of $19.9 million, $0.9 million, and zero, respectively (see Note 5, "Debt").

Derivative liability related to the related party convertible notes as of December 31, 2013 and 2012 are $131.1 million and $7.9 million, respectively. The Company for the year ended December 31, 2013 recognized an $82.3 million loss from change in fair value of the derivative instruments and a $3.1 million income from change in fair value of the derivative instruments for the year ended December 31, 2012, respectively, related to these derivative liabilities (see Note 3, "Fair Value of Financial Instruments").

Related Party Revenue

The Company recognized related party revenue from Novvi for the year ended December 31, 2013, of $1.1 million from product sales and $2.6 million of revenue from the research and development activities that it has performed on behalf of Novvi. The related party accounts receivables from Novvi as of December 31, 2013, was $0.3 million.

The Company recognized related party revenue from Total for the year ended December 31, 2013, of $0.2 million from product sales and as a result of the July 2012 agreements with Total, the Company recognized related party collaboration revenue from Total for the year ended December 31, 2012, of $9.8 million associated with the diesel and jet fuel research and development program. The related party accounts receivables from Total as of December 31, 2013, was $0.2 million.

Joint Venture

In November 2013, the Company and Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS), formed Total Amyris BioSolutions B.V., a private company with limited liability incorporated under the laws of the Netherlands (or JVCO). The common equity of JVCO is jointly owned (50%/50%) by the Company and Total, and the preferred equity of JVCO is 100% owned by the Company. The Parties have agreed that JVCO's purpose is limited to executing the License Agreement and maintaining such licenses under it, unless and until either (i) Total elects to go forward with either the full (diesel and jet fuel) JVCO commercialization program or the jet fuel component of the JVCO commercialization program (a "Go Decision"), (ii) Total elects to not continue its participation in the R&D Program and JVCO (a "No-Go Decision"), or (iii) Total exercises any of its rights to buy out the Company's interest in JVCO. Following a Go Decision, the Articles and Shareholders' Agreement would be amended and restated to be consistent with the shareholders' agreement contemplated by the July 2012 Agreements (see Note 7, "Joint Venture and Noncontrolling Interest").

14. Income Taxes

For the years ended December 31, 2013, 2012 and 2011, the Company recorded a benefit from income taxes of $0.8 million and a provision for income taxes of $1.0 million and $0.6 million, respectively. In the year ended December 31, 2013, the recorded tax benefit was associated with the conversion of certain loans to equity, which reduces the accrual of the interest from the Company's subsidiary and will correspondingly eliminate the withholding tax obligation. The provision for income taxes for the years ended December 31, 2012 and 2011, generally relates to accrued withholding taxes that would be due in connection with the payment of interest on intercompany loans. Other than the above mentioned provision for income tax, no additional provision for income taxes has been made, net of the valuation allowance, due to cumulative losses since the commencement of operations.

The components of loss before income taxes and minority interests are as follows for the years ended December 31, 2013, 2012 and 2011 (in thousands):

	Years Ended December 31,		
	2013	2012	2011
United States	$ (216,583)	$ (146,028)	$ (140,153)
Foreign	(19,171)	(59,024)	(38,806)
Loss before income taxes	$ (235,754)	$ (205,052)	$ (178,959)

The components of the provision for (benefit from) income taxes are as follows for the years ended December 31, 2013, 2012 and 2011 (in thousands):

	Years Ended December 31,		
	2013	2012	2011
Current:			
Federal	$ —	$ —	$ —
State	—	—	—
Foreign	(847)	981	727
Total current provision (benefit)	(847)	981	727
Deferred:			
Federal	—	—	(150)
State	—	—	(25)
Foreign	—	—	—
Total deferred provision (benefit)	—	—	(175)
Total provision for income taxes	$ (847)	$ 981	$ 552

A reconciliation between the statutory federal income tax and the Company's effective tax rates as a percentage of loss before income taxes is as follows:

	Years Ended December 31,		
	2013	2012	2011
Statutory tax rate	(34.0)%	(34.0)%	(34.0)%
State tax rate, net of federal benefit	(0.7)%	(0.3)%	(4.4)%
Stock-based compensation	0.1%	0.2%	0.6%
Federal R&D credit	(0.8)%	—%	(0.8)%
Derivative liability	13.9%	1.3%	—%
Other	(0.6)%	0.2%	(0.7)%
Foreign losses	(1.4)%	(5.8)%	(5.4)%
Change in valuation allowance	23.1%	38.8%	45.0%
Effective income tax rate	(0.4)%	0.4%	0.3%

Temporary differences and carryforwards that gave rise to significant portions of deferred taxes are as follows (in thousands):

	December 31,		
	2013	2012	2011
Net operating loss carryforwards	$ 167,354	$ 145,324	$ 103,390
Fixed assets	822	—	—
Research and development credits	11,654	7,259	5,937
Foreign Tax Credit	935	1,782	801
Accruals and reserves	17,893	15,997	12,150
Stock-based compensation	17,521	15,882	11,351
Capitalized start-up costs	15,133	16,070	22,974
Capitalized research and development costs	45,968	26,850	—
Other	6,741	7,649	2,904
Total deferred tax assets	284,021	236,813	159,507
Fixed assets	—	(525)	(2,742)
Total deferred tax liabilities	—	(525)	(2,742)
Net deferred tax asset prior to valuation allowance	284,021	236,288	156,765
Less: Valuation allowance	(284,021)	(236,288)	(156,765)
Net deferred tax assets (liabilities)	$ —	$ —	$ —

Recognition of deferred tax assets is appropriate when realization of such assets is more likely than not. Based upon the weight of available evidence, especially the uncertainties surrounding the realization of deferred tax assets through future taxable income, the Company believes it is not yet more likely than not that the net deferred tax assets will be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets as of December 31, 2013. The valuation allowance increased $47.7 million, $79.5 million, and $80.7 million, during the years ended December 31, 2013, 2012 and 2011, respectively.

As of December 31, 2013, the Company had federal and state net operating loss carryforwards of approximately $440.4 million and $198.3 million, respectively, available to reduce future taxable income, if any. Approximately $25.8 million and $12.8 million of the federal and state net operating loss carryforwards, respectively, resulted from exercises of employee stock options and vesting of restricted stock units and have not been included in the Company's gross deferred tax assets. In accordance with ASC 718, such unrealized tax benefits will be accounted for as a credit to additional paid-in capital if and when realized through a reduction in income taxes payable.

The Company also has federal research and development credits of $6.7 million and California research and development credit carryforwards of $7.5 million, respectively, at December 31, 2013.

The Tax Reform Act of 1986 and similar state provisions limit the use of net operating loss and credit carryforwards in certain situations where equity transactions result in a change of ownership as defined by Internal Revenue Code Section 382. In the event the Company has experienced an ownership change, as defined, utilization of its federal and state net operating loss and credit carryforwards could be limited. If not utilized, the federal net operating loss carryforward begins expiring in 2025, and the California net operating loss carryforward begins expiring in 2015. The federal research and development credit carryforwards will expire starting in 2024 if not utilized. The California tax credits can be carried forward indefinitely.

In January 2013, the American Taxpayer Relief Act of 2012 (referred to as the ATRA) was enacted. Under prior law, a taxpayer was entitled to a research tax credit for qualifying amounts incurred through December 31, 2011. The ATRA extends the research credit for two years for qualified research expenditures incurred through the end of 2013. The extension of the research credit is retroactive and includes amounts incurred after 2011. The benefit of the reinstated credit did not impact the income statement in the period of enactment, which is the first quarter of 2013, as the research and development credit carryforwards are offset by a full valuation allowance.

Effective January 1, 2007, the Company adopted the accounting guidance on uncertainties in income taxes. A reconciliation of the beginning and ending amounts of unrecognized tax benefits since the adoption of accounting guidance on uncertainty in income taxes is as follows:

Balance at December 31, 2011	$ 3,103
Increases in tax positions for prior period	82
Increases in tax positions during current period	733
Balance at December 31, 2012	$ 3,918
Increases in tax positions for prior period	469
Increases in tax positions during current period	1,693
Balance at December 31, 2013	$ 6,080

The Company's policy is to include interest and penalties related to unrecognized tax benefits within the provision for taxes. The Company determined that no accrual for interest and penalties was required as of December 31, 2013.

As of December 31, 2013, the Company's total unrecognized tax benefits were $6.1 million, of which none of the tax benefits, if recognized, would affect the effective income tax rate due to the valuation allowance that currently offsets deferred tax assets. The Company does not anticipate the total amount of unrecognized income tax benefits will significantly increase or decrease in the next 12 months.

The Company's primary tax jurisdiction is the United States. For United States federal and state tax purposes, tax years 2003 and forward remain open and subject to tax examination by the appropriate federal or state taxing authorities. Brazil tax years 2008 through the current remain open and subject to examination.

As of December 31, 2013, the US Internal Revenue Service (the "IRS") has completed its audit of the Company for tax year 2008 which concluded that there were no adjustments resulting from the audit. While the statutes are closed for tax year 2008, the US federal tax carryforwards (net operating losses and tax credits) may be adjusted by the IRS in the year in which the carryforward is utilized.

15. Reporting Segments

The chief operating decision maker for the Company is the chief executive officer. The chief executive officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by geographic region, for purposes of allocating resources and evaluating financial performance. The Company has one business activity comprised of research and development and sales of fuels and farnesene-derived products and there are no segment managers who are held accountable for operations, operating results or plans for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reportable segment and operating segment structure.

Revenues by geography are based on the location of the customer. The following tables set forth revenue and long-lived assets by geographic area (in thousands):

Revenues

	Years Ended December 31,		
	2013	2012	2011
United States	$ 21,235	$ 49,111	$ 141,098
Brazil	4,071	3,786	141
Europe	10,340	16,461	5,695
Asia	5,473	4,336	57
Total	$ 41,119	$ 73,694	$ 146,991

Long-Lived Assets

	December 31,	
	2013	2012
United States	$ 54,015	$ 70,273
Brazil	85,891	90,982
Europe	685	1,866
Total	$ 140,591	$ 163,121

16. Subsequent Events

Tranche II Notes

In January 2014, the Company sold and issued, for face value, approximately $34.0 million of senior convertible promissory notes in a closing under the August 2013 SPA , as amended by Amendment No. 1 to Securities Purchase Agreement in October 2013 and Amendment No. 2 to Securities Purchase Agreement and Tranche I Note Amendment in December 2013.

In January 2014, Temasek purchased $25.0 million of the Tranche II Notes for cash and certain funds affiliated with Wolverine Asset Management, LLC purchased $3.0 million of the Tranche II Notes for cash. Total purchased approximately $6.0 million of the Tranche II Notes through cancellation of the same amount of principal of previously outstanding convertible promissory notes held by Total (in respect to Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation). The Tranche II Notes are due sixty months from the date of issuance and become convertible into shares of Common Stock of the Company at a conversion price equal to $2.87, which represents a trailing 60-day weighted-average closing price of the Common Stock on the NASDAQ Stock Market through August 7, 2013, subject to adjustment as described below. Specifically, the Tranche II Notes become convertible at the option of the holder (i) at any time 12 months after issuance, (ii) on a change of control of the Company, and (iii) upon the occurrence of an event of default. Each Tranche II Note accrues interest from the date of issuance until the earlier of the date that such Tranche II Note is converted into Common Stock or repaid in full. Interest accrues at a rate per annum equal to 10%, compounded annually (with graduated interest rates of 13% applicable to the first 180 days and 16% applicable thereafter as the sole remedy should the Company fail to maintain NASDAQ listing status or at 12% for all other defaults). Interest for the first 36 months shall be payable in kind and added to principal every year following the issue date and thereafter, the Company may continue to pay interest in kind by adding to principal on every year anniversary of the issue date or may elect to pay interest in cash. The conversion price of the Tranche II Notes is subject to adjustment (i) according to proportional adjustments to outstanding Common Stock in the case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to Tranche II Notes held by any purchase other than Total, in the event that Total exchanges existing convertible notes for new securities of the Company in connection with future financing transactions in excess of its pro rata amount. The holders of the Tranche II Notes have a right to require repayment of 101% of the principal amount of the Tranche II Notes in the event of a change in control of the Company and the Tranche II

Notes provide for payment of unpaid interest on conversion following such a change of control if the holders do not require such repayment.

SMA Indústria Química S.A.

In February 2014, the Company, Amyris Brasil and SMSA entered into an amendment dated January 27, 2014 of the joint venture agreement that the parties originally entered into on April 2010 (see Note 7, "Joint venture and noncontrolling interest"). The amendment to the joint venture agreement with SMSA updates and documents certain preexisting business plan requirements related to the start-up of construction at the joint venture operated plant and sets forth, among other things, (i) the extension of the deadline for the commencement of operations at the joint venture operated plant to no later than 18 months following the construction of the plant, which shall occur no later than March 31, 2017, and (ii) the extension of an option held by SMSA to build a second large-scale farnesene production facility to no later than December 31, 2018 with the commencement of operations at such second facility to occur no later than April 1, 2019.

Export Financing with ABC

In March, 2014, the Company entered into an export financing agreement with ABC Bank for R$5.0 million (approximately US$2.2 million based on exchange rate as of the date the parties entered into the agreement) for a 1 year-term to fund exports through March 2015.

Kuraray Securities Purchase Agreement

On March 28, 2014, the Company and Kuraray Co., Ltd. (or Kuraray) entered into a securities purchase agreement under which the Company agreed to sell shares of its common stock at a price equal to the greater of $2.88 per share or the average daily closing prices per share on the NASDAQ Stock Market for the three month period ending March 27, 2014 for an aggregate purchase price of $4.0 million. The Company and Kuraray also agreed to amend their prexisting collaboration agreement to expand and extend their collaboration with respect to high performance polymers.

Hercules Loan Facility

On March 29, 2014, the Company and Hercules Technology Growth Capital, Inc. entered into a loan and security agreement to make available to Amyris a loan in the aggregate principal amount of up to $25.0 million (referred to as the Hercules Loan Facility), and the Company borrowed the full amount available under the facility. Loans under the facility are secured by various liens, including a lien on certain Company intellectual property. The Hercules Loan Facility generally becomes due on May 31, 2015 and accrues interest at a rate per annum equal to the greater of either the prime rate reported in the Wall Street Journal plus 6.25% or 9.5%. The maturity date is extended to May 31, 2017 if the Company completes a financing transaction for at least $50.0 million in additional cash proceeds by September 30, 2014. The Company may repay the loaned amounts before the maturity date if it pays an additional fee of 3% of the outstanding loans (1% if after the initial twelve-month period). The Company is also required to pay a 1% facility charge at the closing of the transaction, and a 10% end of term charge. In connection with the Hercules Loan Facility, Amyris agreed to certain customary representations and warranties and covenants, as well as certain covenants with respect to obtaining additional financing as described above and performance covenants related to revenues and cash flows starting with the third quarter of 2014. If the Company does not achieve the equity financing covenant, a forbearance fee of $10.0 million becomes due and is required to be paid at the end of the initial term of the facility.

March 2014 Letter Agreement with Total

On April 1, 2014, the Company and Total entered into a letter agreement dated as of March 29, 2014 (referred to as March 2014 Letter Agreement) to amend the Amended and Restated Master Framework Agreement entered into as of December 2, 2013 (included as part of JV Documents). Under the March 2014 Letter Agreement, the Company agreed to (i) amend the conversion price of the Third Closing from $7.0682 to $4.11 (or the "New Conversion Price") subject to stockholder approval at our 2014 annual meeting (to the extent required by applicable law or regulation), (ii) extend the period during which Total may exchange for other Company securities certain outstanding convertible promissory notes issued under the July 2012 Agreements from June 30, 2014 to the later of December 31, 2014 and the date on which Amyris shall have raised $75.0 million of equity and convertible debt financing (excluding any convertible promissory notes issued pursuant to the Total Purchase Agreement), (iii) eliminate the Company's ability to qualify, in a disclosure letter to Total, certain of the representations and warranties that the Company must make at the closing of any sale of the Third Closing, and (iv) provide Total with monthly reporting on the Company's cash, cash equivalents and short-term investments. In consideration of these agreements, Total agreed to waive its right not to consummate the closing of the issuance of the Remaining Notes if it decides not to proceed with the collaboration and makes a "No-Go" decision with respect thereto, subject to the Company obtaining stockholder approval of the issuance of the Third Closing at the New Conversion Price.

SUPPLEMENTARY FINANCIAL DATA
Selected Quarterly Financial Data (unaudited)

The following table presents selected unaudited consolidated financial data for each of the eight quarters in the two-year periods ended December 31, 2013. In the Company's opinion, this unaudited information has been prepared on the same basis as the audited information and includes all adjustments (consisting of only normal recurring adjustments) necessary for a fair statement of the financial information for the periods presented. Net loss per share—basic and diluted, for the four quarters of each fiscal year may not sum to the total for the fiscal year because of the different number of shares outstanding during each period.

	Quarter			
	First	Second	Third	Fourth
	(In thousands, except share and per share amounts)			
Year Ended December 31, 2013				
Total revenues	$ 7,869	$ 10,849	$ 7,004	$ 15,397
Product sales	$ 2,983	$ 4,185	$ 4,144	$ 4,496
Gross profit (loss) from product sales	$ (5,977)	$ (4,668)	$ (4,184)	$ (7,616)
Net loss attributable to common stockholders	$ (32,614)	$ (38,876)	$ (24,199)	$ (139,422)
Net loss per share – basic and diluted	$ (0.44)	$ (0.51)	$ (0.32)	$ (1.83)
Shares used in calculation – basic and diluted	73,306,860	75,959,228	76,205,853	76,377,574
Year Ended December 31, 2012				
Total revenues	$ 29,469	$ 19,263	$ 19,108	$ 5,854
Product sales	$ 26,307	$ 15,580	$ 4,728	$ 3,023
Gross profit (loss) from product sales	$ (17,504)	$ (8,056)	$ 284	$ (2,400)
Net loss attributable to common stockholders	$ (94,548)	$ (46,806)	$ (20,293)	$ (43,492)
Net loss per share – basic and diluted	$ (1.88)	$ (0.81)	$ (0.34)	$ (0.72)
Shares used in calculation – basic and diluted	50,214,192	57,442,834	58,964,226	60,187,256

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (Exchange Act), as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our chief executive officer (CEO) and chief financial officer (CFO) concluded that, as of December 31, 2013, our disclosure controls and procedures are designed and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our chief executive officer and chief financial officer, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that accurately and fairly reflect in reasonable detail the transactions and dispositions of the assets of our company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurances regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material adverse effect on our financial statements.

Our management assessed our internal control over financial reporting as of December 31, 2013, the end of our fiscal year. Management based its assessment on criteria established in "Internal Control-Integrated Framework" (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission**.** Based on management's assessment of our internal control over financial reporting, management concluded that, as of December 31, 2013, our internal control over financial reporting was effective. The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Internal control over financial reporting has inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during our fourth fiscal quarter ended December 31, 2013 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

Certain information required by Part III is omitted from this Annual Report on Form 10-K and is incorporated herein by reference from our definitive proxy statement, relating to our 2013 annual meeting of stockholders, pursuant to Regulation 14A of the Exchange Act, also referred to in this Form 10-K as our 2014 Proxy Statement, which we expect to file with the SEC no later than April 30, 2014.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information appearing in our 2014 Proxy Statement under the following headings is incorporated herein by reference:

- Proposal 1 — Election of Directors
- Corporate Governance
- Section 16(a) Beneficial Ownership Reporting Compliance

The information under the heading "Executive Officers of the Registrant" in Item 1(a) of this Annual Report on Form 10-K is also incorporated by reference in this section.

We have adopted a Code of Business Conduct and Ethics that applies to all directors, officers and employees of Amyris as required by NASDAQ governance rules and as defined by applicable SEC rules. Our Code of Business Conduct and Ethics includes a section entitled "Code of Ethics for Chief Executive Officer and Senior Financial Officers," providing additional principles for ethical leadership and a requirement that such individuals foster a culture throughout Amyris that helps ensure the fair and timely reporting of our financial results and condition. Our Code of Business Conduct and Ethics is available on the corporate governance section of our website at "http://investors.amyris.com/governance.cfm." Stockholders may also obtain a print copy of our Code of Business Conduct and Ethics and our Corporate Governance Guidelines by writing to the Secretary of Amyris at 5885 Hollis Street, Suite 100, Emeryville, California 94608. If we make any substantive amendments to our Code of Business Conduct and Ethics or grant any waiver from a provision of the Internal Revenue Code to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on the corporate governance section of our website at "http://investors.amyris.com/governance.cfm."

ITEM 11. EXECUTIVE COMPENSATION

The information appearing in our 2014 Proxy Statement under the following headings is incorporated herein by reference:

- Executive Compensation
- Director Compensation
- Compensation Committee Interlocks and Insider Participation

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information appearing in our 2014 Proxy Statement under the following headings is incorporated herein by reference:

- Security Ownership of Certain Beneficial Owners and Management
- Equity Compensation Plan Information

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information appearing in our 2014 Proxy Statement under the following headings is incorporated herein by reference:

- Transactions with Related Persons
- Proposal 1 — Election of Directors — Independence of Directors
- Proposal 1 — Election of Directors — Committees of the Board

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information appearing in our 2014 Proxy Statement under the proposal entitled "Ratification of Appointment of Independent Registered Public Accounting Firm" is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report on Form 10-K:

(1) Financial Statements. Reference is made to the Index to the registrant's Financial Statements under Item 8 in Part II of this Form 10-K.

(2) Financial Statement Schedules. The following consolidated financial statement schedule of the registrant is filed as part of this report on Form 10-K and should be read in conjunction with the Consolidated Financial Statements of Amyris, Inc.

SCHEDULE II
VALUATION AND QUALIFYING ACCOUNTS
FOR THE YEARS ENDED DECEMBER 31, 2013, 2012 and 2011
(in thousands)

	Balance at Beginning of Period	Additions	Write-off/ Adjustments	Balance at End of Period
Deferred Tax Assets Valuation Allowance:				
Year ended December 31, 2013	$ 236,288	$ 47,733	$ —	$ 284,021
Year ended December 31, 2012	$ 156,765	$ 79,523	$ —	$ 236,288
Year ended December 31, 2011	$ 76,071	$ 80,694	$ —	$ 156,765

	Balance at Beginning of Period	Additions	Write-off/ Adjustments	Balance at End of Period
Allowance for Doubtful Accounts:				
Year ended December 31, 2013	$ 481		$ (2)	$ 479
Year ended December 31, 2012	$ 245	$ 236	$ —	$ 481
Year ended December 31, 2011	$ —	$ 245	$ —	$ 245

Schedules not listed above are omitted because they are not required, they are not applicable or the information is already included in the consolidated financial statements or notes thereto.

(3) Exhibits. Reference is made to the exhibits listed in the index to exhibits in Item 15(b) below.

(b) Exhibits.

The following table lists the exhibits filed as part of this report on Form 10-K. In some cases, these exhibits are incorporated into this report by reference to exhibits to our other filings with the Securities and Exchange Commission. Where an exhibit is incorporated by reference, we have noted the type of form filed with the Securities and Exchange Commission, the file number of that form, the date of the filing, and the number of the exhibit referenced in that filing.

Exhibit No.	Description	Previously Filed				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
3.01	Restated Certificate of Incorporation	10-Q	001-34885	November 10, 2010	3.01	
3.02	Restated Bylaws	10-Q	001-34885	November 10, 2010	3.02	
4.01	Form of Stock Certificate	S-1	333-166135	July 6, 2010	4.01	
4.02	Amended and Restated Investors' Rights Agreement, dated June 21, 2010, among registrant and its security holders listed therein	S-1	333-166135	June 23, 2010	4.02	
4.03	First Amendment to Amended and Restated Investors' Rights Agreement, dated February 23, 2012, among registrant and registrant's security holders listed therein	S-3	333-180005	March 9, 2012	4.06	
4.04	Amendment No. 2 to Amended and Restated Investors' Rights Agreement, dated December 24, 2012, among registrant and registrant's security holders listed therein	10-K	001-34885	March 28, 2013	4.04	
4.05	Amendment No. 3 to Amended and Restated Investors' Rights Agreement, dated March 27, 2013, among registrant and registrant's security holders listed therein	10-Q	001-34885	June 9, 2013	4.02	
4.06	Amendment No. 4 to Amended and Restated Investors' Rights Agreement, dated October 16, 2013, among registrant and registrant's security holders listed therein					X
4.07	Amendment No. 5 to Amended and Restated Investors' Rights Agreement, dated December 24, 2013, among registrant and registrant's security holders listed therein					X
4.08	Warrant to Purchase Stock, dated December 23, 2011, issued to ATEL Ventures, Inc.	10-K	001-34885	February 28, 2012	4.07	
4.09[d]	Warrant to Purchase Stock, Dated October 16, 2013, issued to Maxwell (Mauritius) Pte Ltd.					X
4.10	Side Letter, dated June 21, 2010, between registrant and Total Gas & Power USA, SAS	S-1	333-166135	June 23, 2010	4.19	

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
4.11	Agreement, dated February 23, 2012, among registrant, Maxwell (Mauritius) Pte Ltd, Naxyris SA, Biolding Investment SA and Sualk Capital Ltd.	10-Q	001-34885	May 9, 2012	4.02	
4.12	Securities Purchase Agreement, dated February 24, 2012, among registrant and certain investment funds affiliated with Fidelity Investments Institutional Services Company, Inc. listed therein (each, a Fidelity Purchaser)	S-3	333-180005	March 9, 2012	4.02	
4.13	Form of Unsecured Senior Convertible Promissory Note issued by registrant to the Fidelity Purchasers in the amounts set forth next to each Fidelity Purchaser's name on Schedule I of Exhibit 4.09 hereof	S-3	333-180005	March 9, 2012	4.03	
4.14	Registration Rights Agreement, dated February 27, 2012, among registrant and the Fidelity Purchasers	S-3	333-180005	March 9, 2012	4.04	
4.15[a]	Form of Common Stock Purchase Agreement among registrant and certain investors	10-Q	001-34885	August 8, 2012	4.01	
4.16	Securities Purchase Agreement, dated July 30, 2012, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	November 9, 2012	4.01	
4.17[b]	1.5% Senior Unsecured Convertible Notes, dated July 30, 2012, September 14, 2012 and December 24, 2012, respectively, issued by registrant to Total Gas & Power USA, SAS	10-Q	001-34885	November 9, 2012	4.02	b
4.18	Registration Rights Agreement, dated July 30, 2012, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	November 9, 2012	4.03	
4.19[c]	Securities Purchase Agreement, dated December 24, 2012, between registrant and certain investors listed therein	10-K	001-34885	March 28, 2013	4.16	
4.20[c]	Follow-On Investment Agreement, dated December 24, 2012, between registrant and Biolding Investment SA	10-K	001-34885	March 28, 2013	4.17	
4.21	Securities Purchase Agreement, dated March 27, 2013, between registrant and Biolding Investment SA	10-Q	001-34885	June 9, 2013	4.01	
4.22	1.5% Senior Unsecured Convertible Note, dated June 6, 2013, issued by registrant to Total Energies Nouvelles Activités USA (f.k.a. Total Gas & Power USA, SAS)	10-Q	001-34885	August 9, 2013	4.01	

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
4.23	Securities Purchase Agreement, dated August 8, 2013, between registrant, Maxwell (Mauritius) Pte Ltd and Total Energies Nouvelles Activités USA (f.k.a Total Gas & Power USA, SAS)	10-Q	001-34885	November 5, 2013	4.01	
4.24[d]	Amendment No. 1 to Securities Purchase Agreement, dated October 16, 2013, between registrant and other parties named therein					X
4.25	Amendment No. 2 to Securities Purchase Agreement and Tranche I Note Amendment Agreement dated December 24, 2013, between registrant and other parties therein					X
10.01	Form of Indemnity Agreement between registrant and its directors and officers	S-1	333-166135	June 23, 2010	10.01	
10.02	Assistance Agreement, dated December 30, 2009, as modified by Assistance Agreement dated March 26, 2010, between registrant and the U.S. Department of Energy, together with schedules and supplements thereto	S-1	333-166135	April 16, 2010	10.09	
10.03	Modification No. 2, dated April 19, 2010, to Assistance Agreement between registrant and the U.S. Department of Energy	S-1	333-166135	May 25, 2010	10.13	
10.04	Modification Nos. 3-8 to Assistance Agreement between registrant and the U.S. Department of Energy	10-K	001-34885	March 28, 2013	10.10	
10.05[c]	Modification No.9, dated January 9, 2013, to Assistance Agreement between registrant and the U.S. Department of Energy	10Q		June 9, 2013	10.01	
10.06[c]	Technology Investment Agreement, dated June 11, 2012, between registrant and The Defense Advanced Research Projects Agency (DARPA)	10-Q	001-34885	August 8, 2012	10.08	
10.07[d]	Modification to Technology Investment Agreement dated November 4, 2013 between registrant and The Defense Advanced Research Project Agency (DARPA)					X
10.08[ce]	Agreement for Credit Opening, dated November 16, 2011, between Amyris Brasil Ltda. and Banco Nacional de Desenvolvimento Econômico e Social - BNDES	10-K	001-34885	February 28, 2012	10.11	

Exhibit No.	Description	Previously Filed				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
10.09[c]	Corporate Guarantee, dated November 28, 2011, issued by registrant to Banco Nacional de Desenvolvimento Econômico e Social - BNDES	10-K	001-34885	February 28, 2012	10.12	
10.10[e]	Bank Credit Agreement, dated December 21, 2011, between Amyris Brasil Ltda. and Banco Pine S.A.	10-K	001-34885	February 28, 2012	10.13	
10.11[e]	Addendum to the Banking Credit Form, dated February 17, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.	10-Q	001-34885	May 9, 2012	10.02	
10.12[e]	Addendum to the Banking Credit Form, dated May 17, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.	10-Q	001-34885	August 8, 2012	10.02	
10.13[e]	Note of Bank Credit, dated June 21, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.	10-Q	001-34885	August 8, 2012	10.03	
10.14[ce]	Global Derivatives Contract (swap agreement), dated June 15, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.	10-Q	001-34885	August 8, 2012	10.04	
10.15[ce]	Note of Bank Credit, dated July 13, 2012, between Amyris Brasil Ltda. and Nossa Caixa Desenvolvimento	10-Q	001-34885	November 9, 2012	10.01	
10.16[ce]	Note of Bank Credit, dated July 13, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.	10-Q	001-34885	November 9, 2012	10.02	
10.17[e]	Fiduciary Conveyance of Movable Goods Agreement, dated July 13, 2012, among Amyris Brasil Ltda., Nossa Caixa Desenvolvimento and Banco Pine S.A.	10-Q	001-34885	November 9, 2012	10.03	
10.18	Corporate Guarantee, dated July 13, 2012, issued by registrant to Nossa Caixa Desenvolvimento	10-Q	001-34885	November 9, 2012	10.04	
10.19	Corporate Guarantee, dated July 13, 2012, issued by registrant to Banco Pine S.A.	10-Q	001-34885	November 9, 2012	10.05	
10.20[c]	Joint Venture Agreement dated April 14, 2010 among registrant, Amyris Brasil S.A. and Usina São Martinho S.A.	S-1	333-166135	August 31, 2010	10.14	
10.21[c]	Shareholders' Agreement dated April 14, 2010 among registrant, Amyris Brasil S.A. and Usina São Martinho S.A.	S-1	333-166135	May 25, 2010	10.17	

Exhibit No.	Description	Previously Filed				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
10.22[d]	Articles of Association of Total Amyris BioSolutions B.V.					X
10.23[d]	Shareholders Agreement dated December 2, 2013					X
10.24[d]	License Agreement dated December 2, 2013 between registrant and Total Amyris BioSolutions B.V.					X
10.25[d]	Pledge of Shares dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Total Amyris BioSolutions B.V.					X
10.26[d]	Escrow Agreement dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Stichting Total Amyris BioSolutions					X
10.27[d]	1.5% Senior Secured Convertible Note dated December 2, 2013 issued by registrant to Total Energies Nouvelles Activités USA					X
10.28	Letter Agreement re: Waiver of Debt Covenants dated December 24, 2013 between registrant and Total Energies Nouvelles Activités USA					X
10.29[d]	Amended and Restated Master Framework Agreement, dated December 2, 2013, between Amyris and Total Gas & Power USA, SAS					X
10.30	Letter Agreement dated December 2, 2013 relating to the Senior Secured Convertible Notes and the 1.5% Senior Unsecured Convertible Notes due 2017 between the registrant and Total Energies Nouvelles Activités USA					X
10.31	Letter Agreement dated October 4, 2013 between registrant and Total Energies Nouvelles Activités USA					X
10.32	Amendment dated December 1, 2013 to Letter Agreement dated October 4, 2013 between registrant and Total Energies Nouvelles Activités USA					X
10.33	Securities Purchase Agreement, dated August 8, 2013, between registrant, Maxwell (Mauritius) Pte Ltd and Total Energies Nouvelles Activités USA (f.k.a. Total Gas & Power USA, SAS)	10-Q	001-34885	November 5, 2013	4.01	

Exhibit No.	Description	Previously Filed				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
10.34	Voting Agreement, dated August 8, 2013, among registrant and registrant's security holders named therein	10-Q	001-34885	November 5, 2013	4.02	
10.35	Securities Purchase Agreement, dated September 20, 2013, between registrant and Naxyris S.A.	10-Q	001-34885	November 5, 2013	4.03	
10.36[c]	Technology License, Development, Research and Collaboration Agreement, dated June 21, 2010, between registrant and Total Gas & Power USA Biotech, Inc.	S-1	333-16135	September 20, 2010	10.46	
10.37	Letter agreement, dated January 11, 2011, between registrant and Total Gas & Power USA Biotech, Inc.	10-Q	001-34885	May 11, 2011	10.01	
10.38[c]	First Amendment to Technology License, Development, Research and Collaboration Agreement, dated November 23, 2011, between Amyris and Total Gas & Power USA SAS	10-K/A	001-34885	May 2, 2012	10.19	
10.39[c]	Master Framework Agreement, dated July 30, 2012, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	November 9, 2012	10.06	
10.40[c]	Second Amendment to the Technology License, Development, Research and Collaboration Agreement, dated July 30, 2012, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	November 9, 2012	10.07	
10.41[c]	Joint Venture Implementation Agreement dated June 3, 2011 among Amyris, Inc., Amyris Brasil S.A., Cosan Combustíveis e Lubrificantes S.A. and Cosan S.A. Indústria e Comércio	10-Q	001-34885	August 11, 2011	10.01	
10.42[c]	Shareholders' Agreement, dated June 3, 2011, among Amyris Brasil S.A., Cosan Combustíveis e Lubrificantes S.A. and Novvi S.A.	10-Q	001-34885	August 11, 2011	10.02	
10.43[ce]	Agreement for the Supply of Sugarcane Juice and Other Utilities, dated March 18, 2011, between Amyris Brasil Ltda. and Paraíso Bioenergia S.A.	10-Q	001-34885	May 9, 2012	10.06	
10.44[ce]	Lease Agreement, dated March 18, 2011, between Amyris Brasil Ltda. and Paraíso Bioenergia S.A.	10-K	001-34885	March 28, 2013	10.37	

Exhibit No.	Description	Previously Filed				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
10.45[ce]	Addendum to Lease Agreement, dated April 28, 2011, between Amyris Brasil Ltda. and Paraíso Bioenergia S.A.	10-K	001-34885	March 28, 2013	10.38	
10.46	Lease, dated August 22, 2007, between registrant and ES East Associates, LLC	S-1	333-166135	April 16, 2010	10.17	
10.47	First Amendment, dated March 10, 2008, to Lease between registrant and ES East Associates, LLC	S-1	333-166135	April 16, 2010	10.18	
10.48	Second Amendment, dated April 25, 2008, to Lease between registrant and ES East Associates, LLC	S-1	333-166135	April 16, 2010	10.19	
10.49	Third Amendment, dated July 31, 2008, to Lease between registrant and ES East Associates, LLC	S-1	333-166135	April 16, 2010	10.20	
10.50	Fourth Amendment, dated November 14, 2009, to Lease between registrant and ES East Associates, LLC	S-1	333-166135	April 16, 2010	10.21	
10.51	Fifth Amendment, dated October 15, 2010, to Lease between registrant and ES East, LLC	10-K	001-34885	March 14, 2011	10.17	
10.52	Sixth Amendment, dated April 30, 2013, to Lease between registrant and ES East, LLC (as successor-in-interest to ES East Associates, LLC)	10-Q	001-34885	August 9, 2013	10.02	
10.53	Lease dated April 25, 2008 between registrant and EmeryStation Triangle, LLC	S-1	333-166135	April 16, 2010	10.22	
10.54	Letter, dated April 25, 2008, amending Lease between registrant and EmeryStation Triangle, LLC	S-1	333-166135	April 16, 2010	10.23	
10.55	Second Amendment, dated February 5, 2010, to Lease between registrant and EmeryStation Triangle, LLC	S-1	333-166135	April 16, 2010	10.24	
10.56	Third Amendment, dated May 1, 2013, to Lease between registrant and EmeryStation Triangle, LLC	10-Q	001-34885	August 9, 2013	10.03	
10.57	Pilot Plant Expansion Right Letter dated December 22, 2008 between registrant and EmeryStation Triangle, LLC	S-1	333-166135	April 16, 2010	10.25	
10.58	Lease Agreement, dated August 10, 2011, between Amyris Brasil Ltda. and Techno Park Empreendimentos e Administração Imobiliária Ltda.	10-K	001-34885	February 28, 2012	10.32	

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.59	First Amendment to Lease Agreement, dated July 31, 2013, between Amyris Brasil Ltda. and Techno Park Empreendimentos e Administração Imobiliária	10-Q	001-34885	November 5, 2013	10.01	
10.60	Private Instrument of Non-Residential Real Estate Lease Agreement, dated March 31, 2008, as amended, between Lucio Tomasiello and Amyris Brasil S.A.	S-1	333-166135	April 16, 2010	10.26	
10.61[ce]	Third Amendment to the Private Instrument of Non Residential Real Estate Lease Agreement, dated October 1, 2012, between Lucio Tomasiello and Amyris Brasil Ltda.	10-K	001-34885	March 28, 2013	0.01051	
10.62[f]	Offer Letter dated September 27, 2006 between registrant and John Melo	S-1	333-16135	April 16, 2010	10.27	
10.63[f]	Amendment, dated December 18, 2008, between registrant and John Melo	S-1	333-16135	April 16, 2010	10.28	
10.64[f]	Offer letter, dated January 17, 2008, between registrant and Paulo Diniz	S-1	333-16135	April 16, 2010	10.31	
10.65[f]	Offer letter, dated March 23, 2012, between registrant and Steven R. Mills	S-1	001-34885	May 9, 2012	10.05	
10.66[df]	Consulting Agreement, dated December 6, 2013, between registrant and Steven R. Mills					X
10.67[f]	Offer letter, dated November 9, 2009, between registrant and Peter Boynton	10-Q	001-34885	August 11, 2011	10.05	
10.68[f]	Offer letter, dated September 30, 2008, between registrant and Joel Cherry	S-1	333-166135	April 16, 2010	10.29	
10.69[f]	Offer letter, dated March 30, 2011, between registrant and Gary Loeb	10-Q	001-34885	June 9, 2013	10.07	
10.70[f]	Amendment to offer letter, dated May 31 2012, between registrant and Gary Loeb	10-Q	001-34885	June 9, 2013	10.08	
10.71[f]	Offer letter, dated July 29, 2010, between registrant and Mark Patel	10-Q	001-34885	June 9, 2013	10.09	
10.72[f]	Offer Letter, dated January 24, 2005, between registrant and Tamara Tompkins	S-1	333-16135	April 16, 2010	10.35	
10.73[f]	Amendment, dated January 15, 2009, between registrant and Tamara Tompkins	S-1	333-16135	April 16, 2010	10.36	
10.74[f]	Separation agreement, dated May 1, 2012, between registrant and Tamara Tompkins	10-Q	001-34885	August 8, 2012	10.12	

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.75[f]	2005 Stock Option/Stock Issuance Plan	10-Q	001-34885	November 9, 2011	10.02	
10.76[f]	Form of Notice of Grant of Stock Option under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.38	
10.77[f]	Form of Notice of Grant of Stock Option (non-Exempt) under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.39	
10.78[f]	Form of Notice of Grant of Stock Option (non-US) under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.40	
10.79[f]	Form of Stock Option Agreement under registrant's 2005 Stock Option/ Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.41	
10.80[f]	Form of Stock Option Agreement (non-US) under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.42	
10.81[f]	Form of Stock Purchase Agreement under registrant's 2005 Stock Option/ Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.43	
10.82[f]	Form of Stock Purchase Agreement (non-US) under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.44	
10.83[f]	2010 Equity Incentive Plan and forms of award agreements thereunder	S-1	333-16135	June 23, 2010	10.46	

Insert Title Here

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.84[f]	2010 Employee Stock Purchase Plan and forms of award agreements thereunder	S-1	333-16135	September 20, 2010	10.45	
10.85	Master Collaboration Agreement, dated March 13, 2013, between registrant and Firmenich SA	10-Q	001-34885	June 9, 2013	10.02	
10.86	Letter agreement, dated March 24, 2013, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	June 9, 2013	10.03	
10.87	Amended and Restated Operating Agreement, dated March 26, 2013, among registrant, Cosan US, Inc. and Novvi LLC	10-Q	001-34885	June 9, 2013	10.04	
10.88	Termination of the Joint Venture Implementation Agreement, dated March 26, 2013, among registrant, Amyris Brasil Ltda., Cosan Lubrificantes e Especialidades S.A. and Cosan S.A. Indústria E Comércio	10-Q	001-34885	June 9, 2013	10.05	

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.89	IP License Agreement, dated as of March 26, 2013, between registrant and Novvi LLC	10-Q	001-34885	June 9, 2013	10.06	
10.90	Settlement Agreement, Termination Agreement and Mutual Release, dated June 25, 2013, between registrant and Tate & Lyle Ingredients Americas LLC	10-Q	001-34885	August 9, 2013	10.04	
10.91	Modification Agreement, dated September 16, 2013, between registrant and Tate & Lyle Ingredients Americas LLC					X
10.92	Amyris, Inc. Executive Severance Plan, effective November 6, 2013					X
10.93[fg]	Compensation arrangements between registrant and its non-employee directors					g
10.94[fh]	Compensation arrangements between registrant and its executive officers					h
21.01	List of subsidiaries					X
23.01	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm					X
24.01	Power of Attorney (see signature page to this Form 10-K)					X
31.01	Certification of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(c) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.02	Certification of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(c) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.01[i]	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.02[i]	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101[j]	The following materials from registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated					X

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
	Statements of Operations; (ii) the Consolidated Balance Sheets; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Convertible Preferred Stock, Redeemable Noncontrolling Interest and Equity (Deficit); (v) the Consolidated Statements of Cash Flows; and (vi) Notes to Consolidated Financial Statements					

a Substantially identical Common Stock Purchase Agreements, each dated May 18, 2012, were entered into with five separate investors. Registrant has filed the form of such Common Stock Purchase Agreements, which is substantially identical in all material respects to all of such Common Stock Purchase Agreements, except as to the parties thereto and the number of shares.

b Registrant issued substantially identical 1.5% Senior Unsecured Convertible Notes (or the Notes) to Total Gas & Power USA, SAS on separate dates. Registrant has filed the first of the Notes (number R-1), and has included, with such exhibit, a schedule (updated Schedule A to Exhibit 4.02) identifying each of the Notes and setting forth the material details in which the other Note(s) differ from the filed Note (i.e., the dates of issuance and the amounts of the Notes).

c Portions of this exhibit, which have been granted confidential treatment by the Securities and Exchange Commission, have been omitted.

d Portions of this exhibit have been omitted pending a determination by the Securities and Exchange Commission as to whether these portions should be granted confidential treatment.

e Translation to English from Portuguese or Dutch, as applicable, in accordance with Rule 12b-12(d) of the regulations promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended (or the Exchange Act).

f Indicates management contract or compensatory plan or arrangement.

g Description contained under the heading "Director Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 12, 2012 is incorporated herein by reference.

h Descriptions contained under the heading "Executive Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 16, 2013.

i This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

j Pursuant to applicable securities laws and regulations, registrant is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions of the federal securities laws as long as registrant has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fails to comply with the submission requirements. These interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act, are deemed not filed for purposes of section 18 of the Exchange Act and otherwise are not subject to liability under these sections.

(c) Financial statements and schedules.

Reference is made to Item 15(a) above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized in the city of Emeryville, County of Alameda, State of California on April 1, 2014.

Dated: April 1, 2014	Amyris, Inc.
	/s/ JOHN G. MELO
	John G. Melo
	President and Chief Executive Officer
	(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John Melo and Paulo Diniz as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOHN MELO **John Melo**	Director, President and Chief Executive Officer (Principal Executive Officer)	April 1, 2014
/s/ PAULO DINIZ **Paulo Diniz**	Interim Chief Financial Officer (Principal Financial Officer)	April 1, 2014
/s/ KAREN WEAVER **Karen Weaver**	Vice President, Corporate Controller (Principal Accounting Officer)	April 1, 2014
/s/ PHILIPPE BOISSEAU **Philippe Boisseau**	Director	April 1, 2014
/s/ NAM-HAI CHUA **Nam-Hai Chua**	Director	April 1, 2014
/s/ JOHN DOERR **John Doerr**	Director	April 1, 2014
/s/ GEOFFREY DUYK **Geoffrey Duyk**	Director	April 1, 2014
/s/ ARTHUR LEVINSON **Arthur Levinson**	Director	April 1, 2014
/s/ CAROLE PIWNICA **Carole Piwnica**	Director	April 1, 2014
/s/ FERNANDO REINACH **Fernando Reinach**	Director	April 1, 2014
HH Sheikh Abdullah bin Khalifa Al Thani	Director	April 1, 2014
/s/ R. NEIL WILLIAMS **R. Neil Williams**	Director	April 1, 2014

Exhibit 31.01

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

PURSUANT TO RULE 13a-14(c) and 15d-(14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, John Melo, certify that:

1. I have reviewed this Annual Report on Form 10-K of Amyris, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 1, 2014

/s/ JOHN MELO

John Melo
President and Chief Executive Officer

Exhibit 31.02

CERTIFICATION OF CHIEF FINANCIAL OFFICER

PURSUANT TO RULE 13a-14(c) and 15d-(14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Paulo Diniz, certify that:

1. I have reviewed this Annual Report on Form 10-K of Amyris, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 1, 2014

/s/ PAULO DINIZ

Paulo Diniz
Interim Chief Financial Officer

Exhibit 32.01

**Certification of CEO Furnished Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 of The Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Amyris, Inc. (the "Company") on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission on the date hereof, I, John Melo, Chief Executive Officer of the Company, certify for the purposes of section 1350 of chapter 63 of title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Annual Report of the Company on Form 10-K for the year ended December 31, 2013 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 1, 2014

/s/ JOHN MELO

John Melo
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.02

Certification of CFO Furnished Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 of The Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Amyris, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission on the date hereof, I, Paulo Diniz, Interim Chief Financial Officer of the Company, certify for the purposes of section 1350 of chapter 63 of title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Annual Report of the Company on Form 10-K for the year ended December 31, 2013 (the “Report”), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 1, 2014

/s/ PAULO DINIZ

Paulo Diniz
Interim Chief Financial Officer
(Principal Financial Officer)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 14A
(RULE 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934
(Amendment No. _______)

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement
☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
☒ Definitive Proxy Statement
☐ Definitive Additional Materials
☐ Soliciting Material Pursuant to §240.14a-12

AMYRIS, INC.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☒ No fee required.
☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.
☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

AMYRIS

Dear Amyris stockholder:

You are cordially invited to attend our 2014 Annual Meeting of Stockholders to be held on Monday, May 12, 2014 at 3:00 p.m. Pacific Time at our headquarters located at 5885 Hollis Street, Suite 100, Emeryville, California. You can find directions to our headquarters on our company website at http://www.amyris.com/en/about-amyris/contact.

The accompanying Notice of Annual Meeting of Stockholders and Proxy Statement describe the matters to be voted on at the meeting. At this year's meeting, you will be asked to elect Class I directors, hold an advisory vote on executive compensation, approve an amendment to our certificate of incorporation to increase our authorized shares, ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for 2014, and approve the issuance of senior secured convertible promissory notes pursuant to NASDAQ Marketplace rules.

Whether or not you plan to attend the annual meeting, please vote as soon as possible. You may vote over the Internet, by telephone, or by mailing a completed proxy card or voter instruction form. Voting by any of these methods will ensure that you are represented at the annual meeting.

On behalf of the Board of Directors, I want to thank you for your continued support of Amyris. We look forward to seeing you at the meeting.

John Melo
President and Chief Executive Officer

Emeryville, California
April 14, 2014

YOUR VOTE IS IMPORTANT

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please vote as soon as possible in order to ensure your representation at the meeting. You may submit your proxy and voting instructions over the Internet, by telephone, or by completing, signing, dating and returning the accompanying proxy card or voter information form as promptly as possible. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other custodian, nominee, trustee or fiduciary and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

AMYRIS, INC.

5885 Hollis Street, Suite 100
Emeryville, California 94608

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held May 12, 2014

The 2014 Annual Meeting of Stockholders of Amyris, Inc. will be held on Monday, May 12, 2014 at 3:00 p.m. Pacific Time at our headquarters located at 5885 Hollis Street, Suite 100, Emeryville, California for the following purposes:

1. To elect the four Class I directors nominated by our Board of Directors (or the Board) and named herein to serve on the Board for a three-year term.
2. To hold a non-binding advisory vote on the compensation of our named executive officers.
3. To approve an amendment to our certificate of incorporation to increase the number of total authorized shares from 205,000,000 shares to 305,000,000 shares and the number of authorized shares of common stock from 200,000,000 shares to 300,000,000 shares.
4. To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014.
5. To approve the issuance of up to $21,700,000 aggregate principal amount of senior secured convertible promissory notes in a private placement transaction and the issuance of the common stock issuable upon conversion of such notes, in accordance with NASDAQ Marketplace Rule 5635.
6. To act upon such other matters as may properly come before the annual meeting or any adjournments or postponements thereof.

These items of business are more fully described in the Proxy Statement accompanying this Notice of Annual Meeting of Stockholders. The board of directors has fixed the record date for the annual meeting as April 9, 2014. Only stockholders of record at the close of business on the record date may vote at the meeting or at any adjournment thereof. A list of stockholders eligible to vote at the meeting will be available for review for any purpose relating to the meeting during our regular business hours at our headquarters at 5885 Hollis Street, Suite 100, Emeryville, California 94608 for the ten days prior to the meeting.

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please vote as soon as possible in order to ensure your representation at the meeting. You may submit your proxy and voting instructions over the Internet, by telephone, or by completing, signing, dating and returning the accompanying proxy card or voter information form as promptly as possible. Under recent regulatory changes, if you have not given your broker specific instructions to do so, your broker will NOT be able to vote your shares with respect to most proposals, including the election of directors, the non-binding advisory vote on named executive officer compensation, approval of the amendment to our certificate of incorporation and approval of the issuance of senior secured convertible promissory notes as required by NASDAQ Marketplace rules. If you do not provide voting instructions over the Internet, by telephone, or by returning a proxy card or voter instruction form, your shares will not be voted with respect to those matters. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other custodian, nominee, trustee or fiduciary and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on May 12, 2014: the Proxy Statement and our 2013 Annual Report to Stockholders are available at http://www.allianceproxy.com/amyris/2014.

BY ORDER OF THE BOARD,

Nicholas Khadder
SVP, General Counsel and Secretary

Emeryville, California
April 14, 2014

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AMYRIS, INC.

PROXY STATEMENT
2014 ANNUAL MEETING OF STOCKHOLDERS

These proxy materials are provided in connection with the solicitation of proxies by the Board of Directors (the "Board") of Amyris, Inc., a Delaware corporation (referred to as "Amyris", the "Company", "we", "us", or "our"), for our 2014 Annual Meeting of Stockholders to be held at 3:00 p.m. Pacific Time on Monday, May 12, 2014, at our principal executive offices, and for any adjournments or postponements of the annual meeting. These proxy materials were first sent on or about April 14, 2014 to stockholders entitled to vote at the annual meeting.

Information Regarding Solicitation and Voting

Our principal executive offices are located at 5885 Hollis Street, Suite 100, Emeryville, California 94608, and our telephone number is (510) 450-0761. This Proxy Statement contains important information for you to consider when deciding how to vote on the matters brought before the meeting. Please read it carefully.

We will bear the expense of soliciting proxies. In addition to these proxy materials, our directors and employees (who will receive no compensation in addition to their regular salaries) may solicit proxies in person, by telephone or email. We will reimburse brokers, banks and other custodians, nominees and fiduciaries (or Intermediaries) for reasonable charges and expenses incurred in forwarding soliciting materials to their clients.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on May 12, 2014

The Securities and Exchange Commission's "Notice and Access" rule provides that companies must include in their mailed proxy materials instructions as to how stockholders can access Amyris' annual report and proxy statement and other soliciting materials online, a listing of matters to be considered at the relevant stockholder meeting, and instructions as to how shares can be voted. Since, based on timing considerations for the 2014 annual meeting, we are mailing full sets of proxy materials to our stockholders, as permitted by SEC proxy rules, we are including the information required by the Notice and Access rule in this Proxy Statement and in the accompanying Notice of Annual Meeting of Stockholders and proxy card, and we are not distributing a separate Notice of Internet Availability of Proxy Materials.

The proxy materials, including this Proxy Statement and our annual report to stockholders, and a means to vote your shares are available at http://www.allianceproxy.com/amyris/2014. You will need to enter the 12-digit control number located on the proxy card accompanying this Proxy Statement in order to view the materials and vote.

Questions and Answers

Who can vote at the meeting?

The Board set April 9, 2014, as the record date for the meeting. If you owned shares of our common stock as of the close of business on April 9, 2014, you may attend and vote your shares at the meeting. Each stockholder is entitled to one vote for each share of common stock held on all matters to be voted on. As of April 9, 2014, there were 77,646,658 shares of our common stock outstanding and entitled to vote.

What is the quorum requirement for the meeting?

The holders of a majority of our outstanding shares of common stock as of the record date must be present in person or represented by proxy at the meeting in order for there to be a quorum, which is required to hold the meeting and conduct business. If there is no quorum, the holders of a majority of the shares present at the meeting may adjourn the meeting to another date.

You will be counted as present at the meeting if you are present and entitled to vote in person at the meeting or you have properly submitted a proxy card or voter instruction form, or voted by telephone or over the Internet. Both abstentions and broker non-votes (as described below) are counted for the purpose of determining the presence of a quorum.

As of the record date of April 9, 2014, there were 77,646,658 shares of our common stock outstanding and entitled to vote, which means that holders of 38,823,330 shares of our common stock must be present in person or by proxy for there to be a quorum.

What proposals will be voted on at the meeting?

There are five proposals scheduled to be voted on at the meeting:

- **Proposal 1** — Election of the four Class I directors nominated by the Board and named herein to serve on the Board for a three-year term.
- **Proposal 2** — A non-binding advisory vote on the compensation of our named executive officers (commonly referred to as a "say-on-pay" vote).
- **Proposal 3** — Approval of an amendment to our certificate of incorporation to increase the number of total authorized shares from 205,000,000 to 305,000,000 and the number of authorized shares of common stock from 200,000,000 to 300,000,000.
- **Proposal 4** — Ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014.
- **Proposal 5** — Approval of the issuance of up to $21,700,000 aggregate principal amount of senior secured convertible promissory notes in a private placement transaction and the issuance of the common stock issuable upon conversion of such notes, in accordance with NASDAQ Marketplace Rule 5635.

No appraisal or dissenters' rights exist for any action proposed to be taken at the meeting. We will also consider any other business that properly comes before the meeting. As of the date of this Proxy Statement, we are not aware of any other matters to be submitted for consideration at the meeting. If any other matters are properly brought before the meeting, the persons named in the enclosed proxy card or voter instruction form will vote the shares they represent using their best judgment.

How does the Board recommend I vote on the proposals?

The Board recommends that you vote:

- FOR each of the director nominees named in this Proxy Statement;
- FOR the non-binding advisory vote on the compensation of our named executive officers;
- FOR the proposed amendment to our certificate of incorporation;
- FOR the ratification of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014; and
- FOR the proposed issuance of $21,700,000 in aggregate principal amount of senior secured convertible promissory notes.

How do I vote my shares in person at the meeting?

If your shares of Amyris common stock are registered directly in your name with our transfer agent, Wells Fargo Bank, National Association, you are considered, with respect to those shares, to be the stockholder of record. As the stockholder of record, you have the right to vote in person at the meeting.

If your shares are held in a brokerage account or by another Intermediary, you are considered the beneficial owner of shares held in street name. As the beneficial owner, you are also invited to attend the meeting. However, since a beneficial owner is not the stockholder of record, you may not vote these shares in person at the meeting unless you obtain a "legal proxy" from the Intermediary that is the record holder of the shares, giving you the right to vote the shares at the meeting. The meeting will be held on Monday, May 12, 2014 at 3:00 p.m. Pacific Time at our headquarters located at 5885 Hollis Street, Suite 100, Emeryville, California. You can find directions to our headquarters on our company website at http://www.amyris.com/en/about-amyris/contact.

How can I vote my shares without attending the meeting?

Whether you hold shares directly as a registered stockholder of record or beneficially in street name, you may vote without attending the meeting. You may vote by granting a proxy or, for shares held beneficially in street name, by submitting voting instructions to your broker, bank or other trustee or nominee. In most cases, you will be able to do this by using the Internet, by telephone or by mail.

- **Voting by Internet or telephone.** You may submit your proxy over the Internet or by telephone by following the instructions for Internet or telephone voting provided with your proxy materials and on your proxy card or voter instruction form.

- **Voting by mail.** You may submit your proxy by mail by completing, signing, dating and returning your proxy card or, for shares held beneficially in street name, by following the voting instructions included by your broker or other Intermediary. If you provide specific voting instructions, your shares will be voted as you have instructed.

What happens if I do not give specific voting instructions?

If you are a stockholder of record and you either indicate when voting on the Internet or by telephone that you wish to vote as recommended by the Board, or you sign and return a proxy card without giving specific voting instructions, then the proxy holders will vote your shares in the manner recommended by the Board on all matters presented in this Proxy Statement and as the proxy holders may determine in their discretion with respect to any other matters properly presented for a vote at the meeting.

If you are a beneficial owner of shares held in street name and do not provide the organization that holds your shares with specific voting instructions, under stock market rules, the organization that holds your shares may generally vote at its discretion only on routine matters and cannot vote on non-routine matters. If the organization that holds your shares does not receive instructions from you on how to vote your shares on a non-routine matter, the organization will inform the inspector of election that it does not have the authority to vote on this matter with respect to your shares. This is generally referred to as a "broker non-vote." In tabulating the voting results for any particular proposal, shares that constitute broker non-votes are not considered entitled to vote on that proposal. Thus, broker non-votes will not affect the outcome of Proposals 1 (which requires a plurality of votes properly cast in person or by proxy) and 2 and 5 (which each require a majority of the votes cast on such proposal), assuming that a quorum is obtained, and will have the effect of a vote against Proposal 3.

Which proposals are considered "routine" and which are considered "non-routine"?

The ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for 2014 (Proposal 4) is considered routine under applicable rules. The election of directors (Proposal 1), the non-binding advisory vote on executive compensation (Proposal 2), the approval of the proposed amendment to our certificate of incorporation (Proposal 3) and the approval of the proposed issuance of senior secured convertible promissory notes (Proposal 5), are considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore we expect there to be broker non-votes on Proposals 1, 2, 3 and 5.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting. The inspector of election will separately count "For" and "Withhold" votes and any broker non-votes in the election of directors. With respect to the other proposals, the inspector of election will separately count "For" and "Against" votes, abstentions and, other than with respect to Proposal 4 which should not have broker non-votes given that it is considered a routine proposal, any broker non-votes. Abstentions will be counted toward the vote totals for these proposals and will have the same effect as an "Against" vote. Broker non-votes will not count toward the vote totals for Proposals 2 and 5 and will not count for or against such proposals, but will have the same effect as an "Against" vote for Proposal 3.

What is the vote required to approve each of the Board's proposals?

- **Proposal 1 — Election of the Board's four nominees for director.** The four nominees receiving the most "For" votes (among votes properly cast in person or by proxy) will be elected.

- **Proposal 2 — Approval of a non-binding advisory vote of the compensation of our named executive officers.** This proposal must receive a "For" vote from the holders of a majority of the votes cast on the proposal at the annual meeting in person or by proxy. Abstentions will be counted toward the vote total for this proposal and will have the same effect as an "Against" vote. Broker non-votes will not count toward the vote total for this proposal and will not count for or against this proposal.

- **Proposal 3 — Approval of an amendment to our certificate of incorporation to increase the number of total authorized shares from 205,000,000 shares to 305,000,000 shares and the number of authorized shares of common stock from 200,000,000 shares to 300,000,000 shares.** The proposal must receive a "For" vote from the holders of a majority of our outstanding shares of common stock entitled to vote at the annual meeting, irrespective of the number of votes cast on the proposal at the meeting. Abstentions and broker non-votes will have the same effect as an "Against" vote for this proposal.

- **Proposal 4 — Ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014.** The proposal must receive a "For" vote from the holders of a majority of the votes cast on the proposal at the annual meeting in person or by proxy. Abstentions will be counted toward the vote total for the proposal and will have the same effect as an "Against" vote for this proposal.

- **Proposal 5 — Approval of the issuance of up to $21,700,000 aggregate principal amount of senior secured convertible promissory notes in a private placement transaction and the issuance of the common stock issuable upon conversion of such notes, in accordance with NASDAQ Marketplace Rule 5635.** This proposal must receive a "For" vote from the holders of a majority of the votes cast on the proposal at the annual meeting in person or by proxy. Abstentions will be counted toward the vote total for this proposal and will have the same effect as an "Against" vote. Broker non-votes will not count toward the vote total for this proposal and will not count for or against this proposal.

How can I revoke my proxy and change my vote after I return my proxy card?

You may revoke your proxy and change your vote at any time before the final vote at the meeting. If you are a stockholder of record, you may do this by signing and submitting a new proxy card with a later date, by using the Internet or voting by telephone (either of which must be completed by 11:59 p.m. Pacific Time on May 11, 2014 — your latest telephone or Internet proxy is counted), or by attending the meeting and voting in person. Attending the meeting alone will not revoke your proxy unless you specifically request that your proxy be revoked. If you hold shares through a bank or brokerage firm, you must contact that bank or firm directly to revoke any prior voting instructions.

How can I find out the voting results of the meeting?

The preliminary voting results will be announced at the meeting. The final voting results will be reported in a current report on Form 8-K, which we expect to file with the Securities and Exchange Commission within four business days after the meeting. If final voting results are not available within four business days after the meeting, we intend to file a current report on Form 8-K reporting the preliminary voting results within that period, and subsequently file the final voting results in an amendment to the current report on Form 8-K within four business days after the final voting results are known to us.

Forward-Looking Statements

This Proxy Statement contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements may be identified by their use of such words as “expects,” “anticipates,” “intends,” “hopes,” “anticipates,” “believes,” “could,” “may,” “will,” “projects” and “estimates,” and other similar expressions, but these words are not the exclusive means of identifying such statements. We caution that a variety of factors, including but not limited to the following, could cause our results to differ materially from those expressed or implied in our forward-looking statements: our cash position and ability to fund our operations, our limited operating history and lack of revenues generated from the sale of our renewable products; our inability to decrease production costs to enable sales of our products at competitive prices; delays in production and commercialization of products due to technical, operational, cost and counterparty challenges; challenges in developing customer base in markets with established and sophisticated competitors; currency exchange rate and commodity price fluctuations; changes in regulatory schemes governing genetically modified organisms and renewable fuels and chemicals, and other risks detailed from time to time in filings we make with the Securities and Exchange Commission, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and our Periodic Reports on Form 8-K. Except as required by law, we assume no obligation to update any forward-looking information that is included in this Proxy Statement.

PROPOSAL 1 —
ELECTION OF DIRECTORS

General

Under our certificate of incorporation and bylaws, the number of authorized Amyris directors has been fixed at 10 and the Board is divided into three classes with staggered three-year terms:

- Class I directors, whose initial term expires at this annual meeting and who are nominated for re-election;
- Class II directors, whose term will expire at the annual meeting of stockholders to be held in 2015;
- Class III directors, whose term will expire at the annual meeting of stockholders to be held in 2016.

In accordance with the certificate of incorporation, the Board has assigned each member of the Board to one of the three classes, with the number of directors in each class divided as equally as reasonably possible. As of the date of this Proxy Statement, there are four Class I seats, three Class II seats, and three Class III seats constituting the 10 seats on the Board.

Stockholders are being asked to vote for the four Class I nominees listed below to serve until our 2017 Annual Meeting of Stockholders and until each such director's successor has been elected and qualified, or each such director's earlier death, resignation or removal. The nominees are all current directors of Amyris. Dr. Duyk was appointed by the unanimous written consent of the Board in May 2012. Dr. Duyk previously served on the Board from May 2006 to May 2011. Two of the four (Mr. Reinach and Ms. Piwnica) were appointed by the unanimous written consent of the Board in connection with our 2010 reincorporation in Delaware and in preparation for our initial public offering, and served on the board of directors of our California corporation predecessor. Ms. Piwnica was also later named to serve on the Board as a designee by Naxyris SA, an investment vehicle owned by Naxos Capital Partners SCA Sicar ("Naxos") in 2012 under an agreement between Amyris and Naxos. HH Sheikh Abdullah bin Khalifa Al Thani ("HH") was appointed by the unanimous written consent of the Board in 2012 and was designated by Biolding Investment SA ("Biolding"), a company HH controls, to serve on the Board under an agreement between Amyris and Biolding.

Vote Required and Board Recommendation

Directors are elected by a plurality of the votes properly cast in person or by proxy. This means that the four Class I nominees receiving the highest number of affirmative (i.e., "For") votes will be elected. At the annual meeting, proxies cannot be voted for a greater number of persons than the four nominees named in this Proposal 1 and stockholders cannot cumulate votes in the election of directors. Shares represented by executed proxies will be voted by the proxy holders, if authority to do so is not withheld for any or all of the nominees, "For" the election of the four nominees named below. If any nominee is unable or declines to serve as a director at the time of the meeting, the proxies will be voted for a nominee, if any, designated by the Board to fill the vacancy. As of the date of this Proxy Statement, the Board is not aware that any nominee up for election is unable or will decline to serve as a director. If you hold shares through a bank, broker or other holder of record, you must instruct your bank, broker or other holder of record how to vote so that your vote can be counted on this proposal.

The Board recommends a vote "FOR" each nominee.

Business Experience and Qualifications of Directors

The following tables and biographies set forth information as of March 15, 2014 for each nominee for election at the annual meeting and for each director of Amyris whose term of office will continue after the annual meeting:

Nominees for Election as Class I Directors for a Term Expiring in 2017

Name	Age	Amyris Offices and Positions
Geoffrey Duyk, M.D., Ph.D.	54	Director, Member of Audit Committee
Carole Piwnica	56	Director, Chair of Leadership Development and Compensation Committee and Member of Nominating and Governance Committee
Fernando de Castro Reinach, Ph.D.	57	Director, Member of Audit Committee
HH Sheikh Abdullah bin Khalifa Al Thani	54	Director

Dr. Geoffrey Duyk has been a member of the Board since May 2012. Dr. Duyk previously served on the Board from May 2006 to May 2011. Dr. Duyk is a partner of TPG Biotech, an affiliate of TPG Biotechnology Partners II, L.P. Previously, he served on the board of directors and was President of Research and Development at Exelixis, Inc., a biopharmaceutical company focusing on drug discovery, from 1996 to 2003. Prior to Exelixis, Dr. Duyk was Vice President of Genomics and one of the founding scientific staff at Millennium Pharmaceuticals, from 1993 to 1996. Before that, Dr. Duyk was an Assistant Professor at Harvard Medical School in the Department of Genetics and Assistant Investigator of the Howard Hughes Medical Institute. Dr. Duyk currently serves on the boards of directors of several private companies and the non-profit Wesleyan University Board of Trustees. He served on the board of directors of Agria Corporation from August 2007 to May 2009, Cardiovascular Systems, Inc. (formerly Replidyne, Inc.) from 2004 to February 2009, and Exelixis, Inc. from 1996 to 2003. Dr. Duyk holds a Bachelor of Arts degree in Biology from Wesleyan University and Doctor of Philosophy and Medicine degrees from Case Western Reserve University. Mr. Duyk's experience with the biotechnology industry enables him to provide insight and guidance to our management team and Board.

Carole Piwnica has been a member of the Board since September 2009. Ms. Piwnica has been Director of NAXOS UK, a consulting firm advising private equity, since January 2008. Previously, Ms. Piwnica served as a director, from 1996 to 2006, and Vice-Chairman of Governmental Affairs, from 2000 to 2006, of Tate & Lyle Plc, a European food and agricultural ingredients company. She was a chairman of Amylum Group, a European food ingredient company and affiliate of Tate & Lyle Plc, from 1996 to 2000. Ms. Piwnica was a member of the board of directors of Aviva plc, a British insurance company, from May 2003 to December 2011, a member of the Biotech Advisory Council of Monsanto from May 2006 to October 2009, a member of the board of directors of Dairy Crest from 2007 until 2010, a member of the board of directors of Toepfer Gmbh from 1996 until 2010 and a member of the board of directors of Louis Delhaize (retail, Belgium) from 2010 until 2013. In 2010, she was appointed as a member of the boards of Eutelsat (satellites, France) and Sanofi (pharmaceuticals, France). Ms. Piwnica holds a Law degree from the Université Libre de Bruxelles and a Master of Laws degree from New York University. She has also been a member of the bar association of the state of New York, USA, since 1985 and was a member of the bar association of Paris, France from 1988 until 2013. Based on her multinational corporate leadership experience and extensive legal and corporate governance experience, Ms. Piwnica contributes guidance to the management team and the Board in leadership of multinational agricultural processing businesses and on legal and corporate governance obligations and best practices.

Dr. Fernando de Castro Reinach has been a member of the Board since September 2008. Dr. Reinach has been a managing partner of Pitanga Fund, a venture capital fund based in Brazil, since May 2011 and has served as a consultant to Votorantim Novos Negócios Ltda., the private equity arm of Votorantim Group, a large Brazilian industrial group, since June 2010. From 2001 to May 2010, Dr. Reinach was a General Partner at Votorantim Novos Negócios Ltda. Before joining Votorantim, he was involved in the creation of two companies, Genomic Engenharia Molecular Ltda., a molecular diagnostic laboratory, and

.ComDominio S/A, a datacenter company. Dr. Reinach holds a Bachelor of Science degree in biology from the University of São Paulo and a Doctor of Philosophy degree in Cell and Molecular Biology from Cornell University Medical College. Dr. Reinach's experience with Brazilian business practices enables him to provide important insight and guidance to our management team and Board and to assist management with establishing and developing operations in Brazil.

HH Sheikh Abdullah bin Khalifa Al Thani has been a member of the Board since March 2012. HH has served as Special Advisor to the Emir since his appointment in April 2007, and was Prime Minister of Qatar from October 1996 to April 2007. HH has served as Chairman of the board of directors of Qatar Investment and Projects Development Holding Company, a Qatari investment group, since March 2011 and as Chairman of the board of directors of Specialized International Services (SIS) Qatar, a business investment company, since October 2011. HH graduated from the Royal Military Academy Sandhurst. HH brings the Board and our management team extensive experience in project development and investment, and his international stature and resources provide us with potential additional opportunities to build and finance our business.

Incumbent Class II Directors with a Term Expiring in 2015

Name	Age	Amyris Offices and Positions
Nam-Hai Chua, Ph.D.	69	Director, Member of Leadership Development and Compensation Committee
John Melo	48	Director, President and Chief Executive Officer
R. Neil Williams	61	Director, Chair of Audit Committee

Dr. Nam-Hai Chua has been a member of the Board since June 2012. Professor Chua has been Andrew W. Mellon Professor and Head of the Laboratory of Plant Molecular Biology at Rockefeller University since 1981. Previously, he served as Associate Professor (1977 – 1981), Assistant Professor (1971 – 1977), and Research Associate (1971 – 1973) at the same university. From 1969 to 1971, he served as Lecturer in the Department of Biochemistry of the Singapore Medical School. Professor Chua was a director of Delta and Pine Land (DLP) from 1993 until it was sold to Monsanto in 2007. He also served as a director of Arpida Ltd. (Muechenstein, Switzerland) from 2004 to 2008 and as chairman of its compensation committee from 2006 to 2008. He has been a director of Temasek Life Sciences Laboratory, Singapore, and chairman of its Strategic Research Program, since 2003, and was appointed Deputy Chairman, Management Board of Temasek Life Sciences Laboratory in October 2012. Professor Chua received his Bachelor of Science degree from the University of Singapore, and Master of Arts and Doctor of Philosophy degrees from Harvard University. Professor Chua provides the Board with insight into the fundamental science behind our technology, including the molecular biology and genetics underlying our strain engineering efforts.

John Melo has nearly three decades of combined experience as an entrepreneur and thought leader in the global fuels industry and technology innovation. Mr. Melo has served as our Chief Executive Officer and a director since January 2007 and as our President since June 2008. Before joining Amyris, Mr. Melo served in various senior executive positions at BP Plc (formerly British Petroleum), one of the world's largest energy firms, from 1997 to 2006, most recently as President of U.S. Fuels Operations from 2004 until December 2006, and previously as Chief Information Officer of the refining and marketing segment from 2001 to 2003, Senior Advisor for e-business strategy to Lord Browne, BP Chief Executive, from 2000 to 2001, and Director of Global Brand Development from 1999 to 2000. Before joining BP, Mr. Melo was with Ernst & Young, an accounting firm, from 1996 to 1997, and a member of the management teams of several startup companies, including Computer Aided Services, a management systems integration company, and Alldata Corporation, a provider of automobile repair software to the automotive service industry. Mr. Melo currently serves on the board of directors of U.S. Venture, Inc. and Renmatix, Inc., and also serves as Vice Chairman of the board of directors of BayBio. Mr. Melo was formerly an appointed member to the U.S. section of the U.S.-Brazil CEO Forum. Mr. Melo's experience as a senior executive at one of the world's largest energy companies provides critical leadership in designing the fuels value chain, shaping strategic direction and business transactions, and in building teams to drive innovation.

R. Neil Williams has been a member of the Board since May 2013. Mr. Williams has served as Senior Vice President and Chief Financial Officer of Intuit Inc. since January 2008. He is responsible for all financial aspects of Intuit, including corporate strategy and business development, investor relations, financial operations and real estate. Before joining Intuit, Mr. Williams was the Executive Vice President and Chief Financial Officer for Visa U.S.A., Inc. In that role, he led all financial functions for Visa U.S.A., Inc. and its subsidiaries, including financial planning, business planning and financial monitoring. Mr. Williams concurrently served as Chief Financial Officer for Inovant LLC, Visa's global information technology organization, responsible for global transactions processing and technology development. His previous banking experience includes senior financial positions at commercial banks in the Southern and Midwest regions of the United States. Mr. Williams is a certified public accountant and received his Bachelor's degree in business administration from the University of Southern Mississippi. Mr. Williams' expertise in accounting, finance and management enables him to provide important insight and guidance to our management team and Board and to serve as chair of our Audit Committee.

Incumbent Class III Directors with a Term Expiring in 2016

Name	Age	Amyris Offices and Positions
Philippe Boisseau	52	Director
John Doerr	62	Director, Chair of Nominating and Governance Committee and Member of Leadership Development and Compensation Committee
Arthur Levinson, Ph.D.	63	Chairman of the Board

Philippe Boisseau has been a member of the Board since November 2010. Mr. Boisseau has served as President, Supply-Marketing and New Energies and a member of the Executive Committee of Total S.A., a French oil and gas company, since January 2012. Previously, Mr. Boisseau served as President of Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS) ("Total"), an affiliate of Total S.A. from February 2007 to December 2011. He also previously served as a member of Total S.A.'s Management Committee since January 2005. He served as President, Middle East of Total S.A.'s Exploration & Production division between 2002 and February 2007 and, before that, as General Manager of Total Austral in Argentina from 1999 to 2002. From 1995 to 1999, he worked in several management positions within the Refining and Marketing division in the U.S. and France. At the beginning of his career, he served in various positions within French government ministries. He graduated from the leading French engineering school, Ecole Polytechnique, and also has a DEA (master's degree) in particle physics from the Ecole Normale Supérieure. Mr. Boisseau's knowledge and experience in the development of alternative energy businesses and their interface with and integration into the traditional energy industry enables him to make a strategic contribution to the Board and provide guidance to the management team in these domains.

John Doerr has been a member of the Board since May 2006. Mr. Doerr has been a Partner at Kleiner Perkins Caufield & Byers, a venture capital firm, since 1980. Mr. Doerr currently serves on the board of directors of Google Inc., as well as on the boards of directors of several private companies. In the past five years, Mr. Doerr has also served on the boards of directors of Amazon.com, Inc. and Move, Inc. (formerly Homestore.com, Inc.). Mr. Doerr holds a Bachelor of Science and a Master of Science in Electrical Engineering and Computer Science degrees from Rice University and a Master of Business Administration degree from Harvard University. Mr. Doerr's global business leadership as general partner of Kleiner Perkins Caufield & Byers, as well as his outside board experience as director of several public companies, enables him to provide valuable insight and guidance to our management team and the Board.

Dr. Arthur Levinson has been a member of the Board since April 2010 and has served as Chairman of the Board since May 2012. Dr. Levinson served as Lead Independent Director from March 2011 to May 2012. In March 2014, Dr. Levinson notified Amyris that effective as of the 2014 annual meeting of stockholders he will resign as a member of the Board. Dr. Levinson has agreed to provide strategic advice and guidance to Amyris following his resignation. Dr. Levinson is chairman of Genentech, Inc. and a member of the Roche Board of Directors. He has been chairman of Genentech since 1999, and he served as chief executive officer of Genentech from 1995 to 2009. Dr. Levinson joined Genentech in 1980 as a research scientist and became vice president, Research Technology in 1989; vice president, Research in

1990; senior vice president, Research in 1992; and senior vice president, Research and Development in 1993. In September 2013, Dr. Levinson was named Chief Executive Officer of Calico, a company focused on health, aging and well-being. Dr. Levinson holds several Board of Directors positions in addition to Amyris, Roche and Genentech. Dr. Levinson was appointed Chairman of the Board of Apple in November 2011. He served as a co-lead director of Apple's Board of Directors since 2005 and a director since 2000. He is a director of NGM Biopharmaceuticals, Inc. and the Broad Institute of MIT and Harvard. Dr. Levinson was a director of Google, Inc. from 2004 to 2009. Dr. Levinson currently serves on the Board of Scientific Consultants of the Memorial Sloan-Kettering Cancer Center, the Industrial Advisory Board of the California Institute for Quantitative Biomedical Research, the Advisory Council for the Princeton University Department of Molecular Biology and the Advisory Council for the Lewis-Sigler Institute for Integrative Genomics. Dr. Levinson has authored or co-authored more than 80 scientific articles and has been a named inventor on 11 United States patents. Dr. Levinson received the Irvington Institute's 1999 Corporate Leadership Award in Science and was honored the same year with the Corporate Leadership Award from the National Breast Cancer Coalition. He was inducted into the Biotech Hall of Fame at the 2003 Biotech Meeting of chief executive officers. *BusinessWeek* named Levinson one of the "Best Managers of the Year" in 2004 – 2005, and Institutional Investor named him "America's Best CEO" in the biotech category four years in a row (2004 – 2007). In 2006, Princeton University awarded Dr. Levinson the James Madison Medal for a distinguished career in scientific research and in biotechnology. Also in 2006, Barron's recognized Dr. Levinson as one of "The World's Most Respected CEOs," and the Best Practice Institute placed Levinson on their "25 Top CEOs" list. In 2008, Dr. Levinson was elected as a Fellow to the American Academy of Arts & Sciences. In 2010, Dr. Levinson was honored by the Biotechnology Industrial Organization with the Biotechnology Heritage Award and by the San Francisco Exploratorium with their Director's Award. In 2011, Dr. Levinson received the American Association for Cancer Research Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research, and in 2012 he received the Cold Spring Harbor Laboratory Double Helix Medal. Dr. Levinson received his Bachelor of Science degree from the University of Washington and earned a doctorate in Biochemical Sciences from Princeton University. Dr. Levinson's experience with the biotechnology industry has enabled him to provide insight and guidance to our management team and the Board.

Arrangements Concerning Selection of Directors

There are no arrangements between any of the nominees and any other party pursuant to which such nominee has been selected as a nominee for election at the annual meeting other than our arrangements with Biolding regarding the nomination of HH described below and our arrangements with Naxos regarding the nomination of Ms. Piwnica.

HH was designated to serve on the Board by Biolding, an affiliate of HH, under a letter agreement (the "Letter Agreement") we entered into in February 2012 in connection with a private placement of our common stock. In connection with such financing, we agreed to appoint one person designated by Biolding to serve as a member of the Board, and to use reasonable efforts consistent with the Board's fiduciary duties, to cause the director designated by Biolding to be re-nominated by the Board in the future. These designation rights terminate upon a sale of Amyris or upon Biolding holding less than 2,595,155 shares of our common stock.

Under the Letter Agreement, we also agreed to appoint one person designated by each of Naxyris SA, an investment vehicle owned by Naxos Capital Partners SCA Sicar, and Maxwell (Mauritius) Pte Ltd ("Maxwell"), which were additional purchasers in the February 2012 common stock offering. Naxyris SA purchased 1,730,103 shares of our common stock and Maxwell purchased 2,595,155 shares our common stock in the offering. Naxyris SA designated Ms. Piwnica (who was already on the Board) to serve as the Naxyris SA representative on the Board, and Maxwell designated Dr. Chua to serves as the Maxwell representative on the Board. These designation rights terminate upon a sale of Amyris or, as applicable, Naxyris SA holding less than 1,730,103 shares of our common stock and Maxwell holding less than 2,595,155 shares of our common stock.

Mr. Doerr was appointed to the Board by Kleiner Perkins Caufield & Byers pursuant to a voting agreement as most recently amended and restated on June 21, 2010. As of the date of this Proxy Statement, notwithstanding the expiration of the voting agreement upon completion of our initial public offering in September 2010, Mr. Doerr continues to serve on the Board and we expect him to continue to serve as a director until his resignation or until his successor is duly elected by the holders of our common stock.

Mr. Boisseau was designated to serve on the Board by Total under a letter agreement between Amyris and Total. As of March 15, 2014, Total beneficially owned 13,617,212 shares of our common stock, representing approximately 17.7% of our outstanding common stock. In June 2010, we issued Series D preferred stock to Total that converted into shares of our common stock upon the completion of our initial public offering in September 2010. In connection with such equity investment, we agreed to appoint a person designated by Total to serve as a member of the Board, and to use reasonable efforts, consistent with the Board's fiduciary duties, to cause the director designated by Total to be re-nominated by the Board in the future. These membership rights terminate upon the earlier of Total holding less than half of the shares of common stock issued upon conversion of the Series D preferred stock or a sale of Amyris.

Independence of Directors

Under the corporate governance rules of The NASDAQ Stock Market ("NASDAQ"), a majority of the members of our Board must qualify as "independent," as affirmatively determined by our Board. Our Board and the Nominating and Governance Committee of the Board consult with our legal counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in the applicable NASDAQ rules. The NASDAQ criteria include various objective standards and a subjective test. A member of the Board is not considered independent under the objective standards if, for example, he or she is, or at any time during the past three years was, employed by Amyris, or he or she is an executive officer of any organization to which Amyris made, or from which the Amyris received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's gross revenues for that year, or $200,000, whichever is more (other than payments arising solely from investments in our securities or payments under non-discretionary charitable contribution matching programs). Mr. Melo is not deemed independent because he is an Amyris employee. The Board did not find Mr. Boisseau to be independent because he is an officer of Total S.A., an affiliate of Total (with which we have a joint venture arrangement that may involve annual payments exceeding 5% of our yearly gross revenues and $200,000, as described in more detail later in this Proxy Statement under the caption "Transactions with Related Persons").

The subjective test under the NASDAQ criteria for director independence requires that each independent director not have a relationship which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The subjective evaluation of director independence by the Board was made in the context of the objective standards referenced above. In making independence determinations, the Board generally considers commercial, financial and professional services, and other transactions and relationships between Amyris and each director and his or her family members and affiliated entities. For each of the directors other than Messrs. Boisseau and Melo, the Board determined that none of the transactions or other relationships exceeded NASDAQ objective standards and none would otherwise interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making this determination, the Board considered certain relationships that did not exceed NASDAQ objective standards and determined that none of these relationships would interfere with the exercise of independent judgment by the director in carrying out his or her responsibilities as a director. The following is a description of these relationships:

- Dr. Chua was designated to serve as our director by Maxwell. As of March 15, 2014, Maxwell beneficially owned 10,353,478 shares of our common stock, which represented approximately 13.4% of our outstanding common stock. Dr. Chua is a project director for the Temasek Life Sciences Institute (a subsidiary of Temasek, which is affiliated with Maxwell) and Deputy Chairman, Board of Directors, for the Temasek Life Sciences Laboratory. He is also Chief Scientific Advisor of Wilmar International Limited, a collaboration partner of Amyris.
- Mr. Doerr is a manager of the general partners of entities affiliated with KPCB Holdings, Inc. As of March 15, 2014, KPCB Holdings, Inc. as nominee for entities affiliated with Kleiner Perkins Caufield & Byers held 4,183,224 shares of our common stock, which represented approximately 5.4% of our outstanding common stock. In addition, as of March 15, 2014, Mr. Doerr beneficially owned 7,037,492 shares of our common stock (including 3,792,510 shares held by KPCB Holdings, Inc. as nominee, and 3,244,982 other shares beneficially owned by Mr. Doerr, including shares issued directly to Mr. Doerr and held by a trust and an investment entity under Mr. Doerr's control), which represented approximately 9.1% of our outstanding common stock.

- Dr. Duyk is a partner of TPG Biotech, an affiliate of TPG Biotechnology Partners II, L.P. As of March 15, 2014, TPG Biotechnology Partners II, L.P. beneficially owned 3,978,660 shares of our common stock, which represented approximately 5.2% of our outstanding common stock.
- Ms. Piwnica was designated to serve as our director by Naxyris SA. As of March 15, 2014, Naxyris SA beneficially owned 5,639,398 shares of our common stock, which represented approximately 7.3% of our outstanding common stock.
- Dr. Reinach was an affiliate of the parent company of Lit Tele LLC during 2010 and continues to have a consulting relationship with such company. As of March 15, 2014, Lit Tele was the record owner of 1,463,793 shares of our common stock, representing approximately 1.9% of our outstanding common stock. Additionally, Dr. Reinach is the sole director of Sualk Capital Ltd, which purchased 170,397 shares of our common stock in private placement offerings during 2012.
- HH indirectly owns, and was designated to serve as our director by, Biolding. As of March 15, 2014, Biolding beneficially owned 7,484,601 shares of our common stock, representing approximately 9.7% of our outstanding common stock.

Maxwell, Naxyris SA, TPG Biotechnology Partners II, L.P., entities affiliated with KPCB Holdings, Inc. and Lit Tele LLC, purchased shares of our predecessor's preferred stock in a series of preferred stock financings completed during the period from May 2006 through January 2010, and such preferred stock converted to common stock on completion of our initial public offering.

Consistent with these considerations, after review of all relevant transactions and relationships between each director, any of his or her family members, Amyris, our executive officers and our independent registered public accounting firm, the Board affirmatively determined that a majority of our Board is comprised of independent directors, and that the following directors are independent: Nam-Hai Chua, John Doerr, Geoffrey Duyk, Arthur Levinson, Carole Piwnica, Fernando de Castro Reinach, HH and R. Neil Williams.

Board Leadership Structure

Our Board is composed of our Chief Executive Officer, John Melo, and nine non-management directors. Arthur Levinson, one of our independent directors, currently serves the principal Board leadership role as the Board's Chairman. Our Board expects to appoint an independent director as Chairman following Dr. Levinson's resignation from the Board effective as of the 2014 Annual Meeting. The Board does not have any policy that the Chair must necessarily be separate from the chief executive officer, but the Board appointed Dr. Levinson as Chairman in May 2012; Dr. Levinson served as Lead Independent Director from March 2011 to May 2012. Dr. Levinson's (and his successor's) responsibilities as Chairman include providing input on Board agendas and working with management to develop agendas for meetings, calling special meetings of the Board, presiding at executive sessions of independent Board members, gathering input from Board members on chief executive officer performance and providing feedback to the chief executive officer, and gathering input from Board members after meetings and through an annual self-assessment process and communicating feedback to the Board and the Chief Executive Officer, as appropriate. The Board believes that having an independent Chair helps reinforce the Board's independence from management in its oversight of our business and affairs. In addition, the Board believes that this structure helps to create an environment that is conducive to objective evaluation and oversight of management's performance and related compensation, increasing management accountability and improving the ability of the Board to monitor whether management's actions are in our best interests and those of our stockholders. Further, this structure permits our Chief Executive Officer to focus on the management of our day-to-day operations. Accordingly, we believe our current Board leadership structure contributes to the effectiveness of the Board as a whole and, as a result, is the most appropriate structure for us at the present time.

Role of the Board in Risk Oversight

We consider risk as part of our regular consideration of business strategy and business decisions. Assessing and managing risk is the responsibility of our management, which establishes and maintains risk management processes, including prioritization, action plans and mitigation measures, designed to balance the risk and benefit of opportunities and strategies. It is management's responsibility to anticipate, identify and communicate risks to the Board and/or its committees. The Board as a whole oversees our risk management systems and processes, as implemented by management and the Board's committees. As part of its oversight role, the Board has adopted an enterprise risk management process that involves management discussions with and updates to members of the Audit Committee regarding enterprise risk prioritization and mitigation. In addition, the Board uses its committees to assist in its risk oversight function as follows:

- The Audit Committee has responsibility for overseeing our financial controls and risk and legal and regulatory matters.
- The Leadership Development and Compensation Committee is responsible for oversight of risk associated with our compensation plans.
- The Nominating and Governance Committee is responsible for oversight of Board processes and corporate governance related risks.

The Board receives regular reports from committee Chairs regarding the committees' activities. In addition, discussions with the Board about our strategic plan and objectives, business results, financial condition, compensation programs, strategic transactions, and other business discussed with the Board, include a discussion of the risks associated with the particular item under consideration.

Meetings of the Board and Committees

During fiscal year 2013, our Board had seven meetings, and its three standing committees (the Audit Committee, Leadership Development and Compensation Committee, and Nominating and Governance Committee) collectively had 22 meetings. With the exception of HH, who attended four of seven meetings of the Board during fiscal year 2013, each incumbent director attended at least 75% of the meetings (held during the period that such director served) of the Board and the committees on which such director served in fiscal year 2013. The Board's policy is that directors are encouraged to attend our annual meetings of stockholders. Two directors attended our 2013 annual meeting of stockholders.

The following table provides membership and meeting information for the Board and its committees in fiscal year 2013:

Member of the Board in Fiscal Year 2013	Board	Audit Committee	Leadership Development and Compensation Committee	Nominating and Governance Committee
Ralph Alexander(1)	X	X	Chair(2)	
Philippe Boisseau	X			
Nam-Hai Chua, Ph.D.	X		X(3)	
John Doerr	X		X	Chair(4)
Geoffrey Duyk, M.D., Ph.D.	X	X		
Arthur Levinson, Ph.D.	X			
John Melo	X			
Patrick Pichette(5)	X	Chair	X	
Carole Piwnica	X		Chair(4)	X
Neil Renninger, Ph.D.(6)	X			
Fernando de Castro Reinach, Ph.D(7)	X	X		
HH Sheikh Abdullah bin Khalifa Al Thani(8)	X			
R. Neil Williams	X	Chair(9)		
Total meetings in fiscal year 2012(10)	7	11	7	4

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(1) Mr. Alexander resigned from the Board in July 2013.

(2) Mr. Alexander resigned as Chair of the Leadership Development and Compensation Committee in May 2013.

(3) Dr. Chua was appointed to the Leadership Development and Compensation Committee in May 2013 concurrent with Mr. Alexander stepping down from that role.

(4) Mr. Doerr was appointed to Chair of the Nominating and Governance Committee in May 2013 concurrent with Ms. Piwnica stepping down from that role. Ms. Piwnica was appointed to Chair of the Leadership Development and Compensation Committee in May 2013 concurrent with Mr. Doerr stepping down from that role.

(5) Mr. Pichette resigned from the Board in May 2013.

(6) Dr. Renninger resigned from the Board in February 2013.

(7) Dr. Reinach was appointed to the Audit Committee in July 2012 concurrent with Mr. Alexander's resignation.

(8) HH attended 4 of 7 Board meetings held during the year.

(9) Mr. Williams was appointed to the Board and was named Chair of the Audit committee in May 2013 concurrent with Mr. Pichette's resignation.

(10) Includes one concurrent meeting of the Board, Audit Committee and Leadership Development and Compensation Committee and one concurrent meeting of the Board and Audit Committee.

Committees of the Board

Our Board has established an Audit Committee, a Leadership Development and Compensation Committee, and a Nominating and Governance Committee, each as described below. Members serve on these committees until their resignations or until otherwise determined by the Board.

Audit Committee

The Audit Committee was established by the Board in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and assists the Board in fulfilling the Board's oversight of our accounting and system of internal controls, the quality and integrity of our financial reports, and the retention, independence and performance of our independent registered public accounting firm.

Under NASDAQ rules, we must have an audit committee of at least three members, each of whom must be independent as defined under the rules and regulations of NASDAQ the Securities and Exchange Commission (the "SEC") rules and regulations. Our Audit Committee is currently composed of three directors: Messrs. Reinach, Williams and Dr. Duyk. Mr. Williams is the Chair of the Audit Committee. The composition of the Audit Committee meets the requirements for independence under current NASDAQ and SEC rules and regulations. The Board has determined that each member of the Audit Committee is independent (as defined in the relevant NASDAQ and SEC rules and regulations), and is financially literate and able to read and understand fundamental financial statements, including a company's balance sheet, income statement and cash flow statement. In addition, the Board has determined that Mr. Williams is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act of 1933, as amended (the "Securities Act") with employment experience in finance and accounting and other comparable experience that results in his financial sophistication. Being an "audit committee financial expert" does not impose on Mr. Williams any duties, obligations or liabilities that are greater than are generally imposed on him as a member of the Audit Committee and the Board. The Board has adopted a written charter for our Audit Committee that is posted on our company website at http://investors.amyris.com/governance.cfm.

The Audit Committee performs the following functions:

- oversees our accounting and financial reporting processes and audits of our consolidated financial statements;

- oversees our relationship with our independent auditors, including appointing and changing our independent auditors and ensuring their independence;
- reviews and approves the audit and permissible non-audit services to be provided to us by our independent auditors;
- facilitates communication among the independent auditors, our financial and senior management, and the Board; and
- monitors the periodic reviews of the adequacy of our accounting and financial reporting processes and systems of internal control.

In addition, the Audit Committee generally reviews and approves any proposed transaction between Amyris and any related party, establishes procedures for receipt, retention and treatment of complaints received by Amyris regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission by employees of Amyris, of their concerns regarding questionable accounting or auditing matters (including administration of our whistleblower policy established by the Nominating and Governance Committee), and oversees the review of any complaints and submissions received through the complaint and anonymous reporting procedures.

Leadership Development and Compensation Committee

Under NASDAQ rules, compensation of the executive officers of a company must be determined, or recommended to the Board for determination, either by independent directors constituting a majority of the Board's independent directors in a vote in which only independent directors participate, or by a compensation committee composed solely of independent directors. Amyris has established the Leadership Development and Compensation Committee for such matters, which is currently composed of three directors: Mr. Doerr, Ms. Piwnica and Dr. Chua. Ms. Piwnica is the Chair of the Leadership Development and Compensation Committee. The Board has determined that each member of the Leadership Development and Compensation Committee is independent (as defined in the relevant NASDAQ and SEC rules and regulations). The Board has adopted a written charter for our Leadership Development and Compensation Committee that is posted on our company website at http://investors.amyris.com/governance.cfm.

The purpose of the Leadership Development and Compensation Committee is to provide guidance and periodic monitoring for all of our compensation, benefit, perquisite and employee equity programs. The Leadership Development and Compensation Committee, through delegation from the Board, has principal responsibility to evaluate, recommend, approve and review executive officer and director compensation arrangements, plans, policies and programs maintained by Amyris and to administer our cash-based and equity-based compensation plans, and may also make recommendations to the Board regarding the Board's remaining responsibilities relating to executive compensation. The Leadership Development and Compensation Committee discharges the responsibilities of the Board relating to compensation of our executive officers, and, among other things:

- reviews and approves the compensation of our executive officers;
- reviews and recommends to the Board the compensation of our directors;
- reviews and approves the terms of any compensation agreements with our executive officers;
- administers our stock and equity incentive plans;
- reviews and makes recommendations to the Board with respect to incentive compensation and equity plans; and
- establishes and reviews our overall compensation strategy.

The Leadership Development and Compensation Committee also reviews the Compensation Discussion and Analysis section of our Annual Report on Form 10-K and Proxy Statement and recommends to the Board whether it be included in the Proxy Statement, and prepares a report of the committee for inclusion in the Annual Report on Form 10-K and Proxy Statement for our annual meetings in accordance with SEC rules. The Leadership Development and Compensation Committee has authority to form and delegate authority to subcommittees, as appropriate.

The Board has established a Management Committee for Employee Equity Awards, consisting of our Chief Human Resources Officer and our Chief Executive Officer. This committee may grant stock awards to employees who are not officers (as that term is defined in Section 16 of the Exchange Act and Rule 16a-1 promulgated under the Exchange Act) of Amyris, provided that this committee is authorized to grant only stock awards that meet stock award grant guidelines approved by the Board or Leadership Development and Compensation Committee. These guidelines set forth, among other things, any limit imposed by the Board or Leadership Development and Compensation Committee on the total number of shares that may be subject to equity awards granted to employees by the Management Committee for Employee Equity Awards, and any requirements as to the size of an award based on the seniority of an employee or other factors.

Under its charter, the Leadership Development and Compensation Committee, has the authority, at the expense of Amyris, to retain legal and other consultants, accountants, experts and advisors of its choice to assist the committee in connection with its functions. During the past fiscal year, the Leadership Development and Compensation Committee engaged Compensia, Inc. as its compensation consultant. (Compensia also served as the committee's compensation consultant for 2012.) Compensia provided the following services during fiscal year 2013 (or in connection with 2013 compensation):

- reviewed and provided recommendations on composition of the peer group, and provided compensation data relating to executives at the selected peer group companies;
- conducted a review of the total compensation arrangements for all executive officers of Amyris;
- provided advice on executive officers' compensation, including composition of compensation for base pay, short-term incentive (cash bonus) plan and long-term incentive (equity) plans;
- provided advice on executive officers' cash bonus plan;
- assisted with executive equity program design, including analysis of equity mix, aggregate share usage and target grant levels;
- provided advice and recommendations regarding executive prerequisites including our executive severance and change in control plan;
- conducted a Board compensation review and provided recommendations to the Leadership Development and Compensation Committee regarding director pay structure;
- updated the Leadership Development and Compensation Committee on emerging trends/best practices in the area of executive and board compensation; and

Compensia (including its affiliates) did not perform any services for us or any of our affiliates other than compensation consulting services related to determining or recommending the form or amount of executive and director compensation, designing and implementing incentive plans, and providing information on industry and peer group pay practices, which services were provided directly to the Leadership Development and Compensation Committee. The committee approved all such services performed by Compensia during 2013 and determined in connection with such approvals that Compensia did not have any relationships with Amyris or any of its officers or directors (other than the approved compensation consulting services) or any conflicts of interest that would impair its independence.

The Human Resources, Finance and Legal departments of Amyris work with our Chief Executive Officer to design and develop new compensation programs applicable to executive officers and directors, to recommend changes to existing compensation programs, to recommend financial and other performance targets to be achieved under those programs, to prepare analyses of financial data, to prepare peer compensation comparisons and other committee briefing materials, and to implement the decisions of the Leadership Development and Compensation Committee. Members of these departments and our Chief Executive Officer also meet separately with Compensia to convey information on proposals that management may make to the Leadership Development and Compensation Committee, as well as to allow

Compensia to collect information about Amyris to develop its recommendations. In addition, our Chief Executive Officer conducts reviews of the performance and compensation of the other executive officers, and based on these reviews and input from Compensia, and our Human Resources department, makes recommendations regarding executive compensation (other than his own) directly to the Leadership Development and Compensation Committee. None of our executive officers participated in the determinations or deliberations of the Leadership Development and Compensation Committee regarding the amount of any component of his or her own fiscal year 2013 compensation.

Nominating and Governance Committee

Under NASDAQ rules, director nominees must be selected, or recommended for the Board's selection, either by independent directors constituting a majority of the Board's independent directors, or by a nominations committee composed solely of independent directors. Amyris has established the Nominating and Governance Committee for such matters, which is currently composed of two directors: Mr. Doerr and Ms. Piwnica. Mr. Doerr is the Chair of the Nominating and Governance Committee. The Board has determined that each member of the Nominating and Governance Committee is independent (as defined in the relevant NASDAQ and SEC rules and regulations). The Board has adopted a written charter for our Nominating and Governance Committee that is posted on our company website at http://investors.amyris.com/governance.cfm.

The purpose of the Nominating and Governance Committee is to ensure that the Board is properly constituted to meet its fiduciary obligations to stockholders and Amyris, and to assist the Board with respect to corporate governance matters, including:

- identifying, considering and nominating candidates for membership on the Board;
- developing, recommending and periodically reviewing corporate governance guidelines and policies for Amyris (including our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Whistleblower Policy and Insider Trading Policy); and
- advising the Board on corporate governance matters and Board performance matters, including recommendations regarding the structure and composition of the Board and Board committees.

The Nominating and Governance Committee also monitors the size, leadership and committee structure of the Board and makes any recommendations for changes to the Board, reviews our narrative disclosures in SEC filings regarding the director nomination process, Board leadership structure and risk oversight by the Board, considers and approves any requested waivers under our Code of Business Conduct and Ethics, reviews and makes recommendations to the Board regarding formal procedures for stockholder communications with members of the Board, reviews with the Chief Executive Officer and Board leadership the succession plans for senior management positions, and oversees an annual self-evaluation process for the Board.

Director Nomination Process

In carrying out its duties to consider and nominate candidates for membership on the Board, the Nominating and Governance Committee considers a mix of perspectives, qualities and skills that would contribute to the overall corporate goals and objectives of Amyris and to the effectiveness of the Board. The committee's goal is to nominate directors who will provide a balance of industry, business and technical knowledge, experience and capability. To this end, the committee considers a variety of characteristics for director candidates, including demonstrated ability to exercise sound business judgment, relevant industry or business experience, understanding of and experience with issues and requirements facing public companies, excellence and a record of professional achievement in the candidate's field, relevant technical knowledge or aptitude, having sufficient time and energy to devote to the affairs of Amyris, independence for purposes of compliance with NASDAQ and SEC rules and regulations as applicable, and commitment to rigorously represent the long-term interests of our stockholders. Although the committee uses these and other criteria to evaluate potential nominees, we have no stated minimum criteria for nominees. While we do not have a formal policy with regard to the consideration of diversity in identifying director nominees, the committee strives to nominate directors with a variety of complementary skills and experience so that, as a group, the Board will possess the appropriate talent, skills and experience to oversee our business.

The Nominating and Governance Committee generally uses the following processes for identifying and evaluating nominees for director:

- In the case of incumbent directors, the committee reviews the director's overall service to Amyris during such director's term, including performance, effectiveness, participation and independence.

- In seeking to identify new director candidates, the committee may use its network of contacts to compile a list of potential candidates and may also engage, if deemed appropriate, a professional search firm. The committee would conduct any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The committee would then meet to discuss and consider the candidates' qualifications and select nominees for recommendation to the Board by majority vote.

The Nominating and Governance Committee will consider director candidates recommended by stockholders and will use the same criteria to evaluate all candidates. We have not received a recommendation for a director nominee for the 2015 annual meeting from a stockholder or stockholders. Stockholders who wish to recommend individuals for consideration by the Nominating and Governance Committee to become nominees for election to the board may do so by delivering a written recommendation to the Nominating and Governance Committee at the following address: Chair of the Nominating and Corporate Governance Committee c/o Secretary of Amyris, Inc. at 5885 Hollis Street, Suite 100, Emeryville, California 94608, at least 120 days prior to the anniversary date of the mailing of our Proxy Statement for the last annual meeting of stockholders, which for our 2015 annual meeting of stockholders is a deadline of December 10, 2014. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience and directorships for at least the previous five years, complete biographical information, a description of the proposed nominee's qualifications as a director and a representation that the nominating stockholder is a beneficial or record owner of our Common Stock. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected.

Stockholder Nominations

Stockholders who wish to nominate persons directly for election to the Board at an annual meeting of stockholders must meet the deadlines and other requirements set forth in our bylaws and the rules and regulations of the SEC. As provided in our certificate of incorporation, subject to the rights of the holders of any series of preferred stock, any vacancy occurring in the Board can generally be filled only by the affirmative vote of a majority of the directors then in office. The director appointed to fill the vacancy will hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which the director has been assigned expires or until such director's successor shall have been duly elected and qualified.

Stockholder Communications with Directors

The Board has established a process by which stockholders may communicate with the Board or any of its members, including the Chairman of the Board, or to the independent directors generally. Stockholders and other interested parties who wish to communicate with the Board or any of the directors may do so by sending written communications addressed to the Secretary of Amyris at 5885 Hollis Street, Suite 100, Emeryville, California 94608. The Board has directed that all communications will be compiled by the Secretary and submitted to the Board or the selected group of directors or individual directors on a periodic basis. These communications will be reviewed by our Secretary, who will determine whether they should be presented to the Board. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements and solicitations). The screening procedures have been approved by a majority of the non-management directors of the Board. Directors may at any time request that we forward to them immediately all communications received by us. All communications directed to the Audit Committee in accordance with the procedures described above that relate to accounting, internal accounting controls or auditing matters involving Amyris will be promptly and directly forwarded to all members of the Audit Committee.

Proposal 2 —
Non-Binding Advisory Vote on Compensation of Named Executive Officers

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, the stockholders of Amyris may cast an advisory and non-binding vote at the Annual Meeting in relation to the compensation of our named executive Officers as disclosed in this Proxy Statement in accordance with SEC rules. Our practice, which was approved by our stockholders at the 2011 Annual Meeting, is to conduct this non-binding vote on a triennial basis. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement.

This proposal is set forth in the following resolution:

> RESOLVED, that the stockholders of Amyris, Inc. approve, on an advisory basis, the compensation of its named executive officers, as disclosed in this Proxy Statement, pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables, and any related material disclosed in this Proxy Statement.

As an advisory vote, this proposal is non-binding. Although the vote is non-binding, the Board and the Leadership Development and Compensation Committee value the opinions of our stockholders, and will carefully consider the outcome of the vote when making future compensation decisions for our named executive officers.

As described more fully in the Compensation Discussion & Analysis, the Board and the Leadership Development and Compensation Committee believe that our compensation policies, which set forth clear and simple objectives, will yield the best results.

Our objectives are to:

1. Attract, retain, and motivate highly talented employees that are key to Amyris' success.
2. Reinforce Amyris' core values and foster a sense of ownership, urgency and entrepreneurial spirit.
3. Link compensation to individual, team, and company performance (as appropriate by employee level).
4. Emphasize performance-based compensation for individuals who can most directly impact shareholder value.
5. Provide exceptional pay for delivering exceptional results.

We believe our compensation program is aligned with the long-term interests of our stockholders and that our compensation policies provide an appropriate blend of compensation to retain our executives, reward them for performance in the short term and induce them to contribute to the creation of value in Amyris over the long term. We view the different components of our executive compensation as distinct, each serving particular functions in furthering our compensation philosophy and objectives, and together providing a holistic approach to achieving such philosophy and objectives.

Our executive competitive compensation program is designed to enable us to attract and retain the top executives and employees necessary to develop our business, while being prudent in the management of our cash and equity. Based on this approach, we continue to aim to balance and reward annual and long-term performance with a total compensation package that includes a mix of both cash and equity. Our compensation program is intended to align the interests of management, key employees and stockholders and to encourage the creation of stockholder value by providing long-term incentives through equity ownership. The Compensation Discussion and Analysis set forth on pages 39 – 51 of this Proxy Statement explain our compensation philosophy in greater detail. We urge you to read the Compensation Discussion and Analysis section for additional details on our executive compensation, including our compensation philosophy and objectives and the 2013 compensation of the named executive officers.

Vote Required and Board Recommendation

The proposal must receive a "For" vote from the holders of a majority of the votes cast on the proposal at the annual meeting in person or by proxy. Abstentions will be counted toward the vote total for the proposal and will have the same effect as an "Against" vote. Shares represented by executed proxies that do not indicate a vote "For," "Against" or "Abstain" will be voted by the proxy holders "For" the adoption of the resolution. If you own shares through a bank, broker or other holder of record, you must instruct your bank, broker or other holder of record how to vote in order for them to vote your shares so that your vote can be counted on this proposal. Broker non-votes will not count toward the vote total for this proposal and will not count for or against the proposal.

The Board recommends a vote "FOR" this Proposal 2.

Proposal 3 —
Approval of Amendment to Certificate of Incorporation to Increase Number of Authorized Shares

General

We are asking stockholders to approve an amendment to our certificate of incorporation to increase the number of total authorized shares from 205,000,000 shares to 305,000,000 shares and the number of authorized shares of common stock from 200,000,000 shares to 300,000,000 shares.

The additional common stock will have rights identical to our currently outstanding common stock. The number of authorized shares of our preferred stock will not be affected by this amendment; it will be maintained at 5,000,000 shares. No shares of preferred stock have been issued, and we currently have no plans, arrangements, commitments or understandings with respect to the issuance of any shares of preferred stock.

The reason for the proposed amendment is to increase our financial flexibility and to facilitate our ability to continue implementing our employee equity programs at competitive levels. Our cash flow from operations has been, and continues to be, negative. We have reported in our recent quarterly and annual reports on Form 10-Q and 10-K that we need to raise additional operating capital. The Board may determine that the optimal manner for doing so is the sale of equity securities, instruments convertible into equity securities and/or options or rights to acquire equity securities. For example, in 2013, we engaged in multiple financings involving the private placement of our common stock or convertible promissory notes.

As of March 15, 2014, approximately 87.3% of our currently authorized common stock has either been issued, or is reserved for issuance under our equity incentive plans and upon conversion of outstanding convertible promissory notes, after taking into consideration the full potential of interest that accrues and can convert to equity. We do not currently have enough shares authorized to provide for sufficient flexibility to pursue appropriate equity financing opportunities if they arise or to take certain other actions that the Board may determine is in the best interests of Amyris and the best interests of our stockholders.

The Board believes it is desirable for us to have the flexibility to issue, without further stockholder action, additional shares of common stock in excess of the amount that is currently authorized. As is the case with the current authorized, unreserved, but unissued shares of common stock, the additional shares of common stock authorized by this proposed amendment could be issued upon approval by the Board without further vote of our stockholders except as may be required in particular cases by applicable law, regulatory agencies or, if the shares of common stock become listed, the rules of a stock exchange. Such shares would be available for issuance from time to time as determined by the Board for any proper corporate purpose. Such purposes might include, without limitation, issuance in public or private sales for cash as a means of obtaining additional capital for use in our business and operations, issuance in repayment of indebtedness and/or issuance pursuant to stock plans relating to options, stock appreciation rights, restricted stock, restricted stock units and other equity grants.

Article IV of our certificate of incorporation, as amended, currently authorizes us to issue up to 205,000,000 shares of stock, with 200,000,000 designated as common stock and 5,000,000 designated as preferred stock. At our 2013 annual meeting of stockholders our stockholders approved the increase of our total authorized shares from 105,000,000 shares to 205,000,000 shares and the number of authorized shares of common stock from 100,000,000 shares to 200,000,000 shares. In March 2014, the Board approved the advisability of and adopted, subject to stockholder approval, an amendment to Article IV to again increase the total authorized shares and the authorized shares of common stock as described above. This amendment to the certificate of incorporation requires approval of both the Board and our stockholders. Accordingly, we are seeking stockholder approval for the amendment by means of this Proxy Statement.

Vote Required and Board Recommendation

The proposal must receive a "For" vote from the holders of a majority of our outstanding shares of common stock entitled to vote at the annual meeting, irrespective of the number of votes cast on the proposal at the meeting. Abstentions and broker non-votes will have the same effect as an "Against" vote for this proposal. Shares represented by executed proxies that do not indicate a vote "For," "Against" or

"Abstain" will be voted by the proxy holders "For" the adoption of the resolution. If you own shares through a bank, broker or other holder of record, you must instruct your bank, broker or other holder of record how to vote in order for them to vote your shares so that your vote can be counted on this proposal.

The Board recommends a vote "FOR" this Proposal 3.

Purpose of Proposed Amendment

Our common stock consists of a single class, with equal voting, distribution, liquidation and other rights. As of March 15, 2014, of our 200,000,000 shares of authorized common stock, 77,038,444 shares were outstanding and 97,573,629 shares were reserved for issuance under our equity plans, outstanding convertible promissory notes and other outstanding rights to acquire common stock. As of March 15, 2014, we had 19,644,669 shares reserved for issuance under our equity incentive plans, 60,000 shares reserved for non-equity incentive plan related options, 1,021,087 shares reserved for issuance under outstanding warrants, and 76,847,873 shares reserved for issuance under outstanding convertible promissory notes, which includes interest convertible to common stock under certain of such notes. This leaves only 25,387,927 shares of common stock that are authorized but not issued and outstanding or reserved for issuance. We also expect to issue up to an aggregate of $21.7 million in senior convertible promissory notes to Total in July 2014 and January 2015. The arrangements with Total are described in more detail below in this Proxy Statement under the caption "Transactions with Related Persons — Total Transactions," and the number of shares issuable under such senior convertible promissory notes is subject to increase if Proposal 5 is adopted. Please see "Proposal 5 — Approval of the issuance of up to $21,700,000 aggregate principal amount of senior secured convertible promissory notes in a private placement transaction and the issuance of the common stock issuable upon conversion of such notes, in accordance with NASDAQ Marketplace Rule 5635."

The increase in authorized shares of common stock will give the Board the flexibility to undertake certain transactions to support our business operations, without the potential expense or delay associated with obtaining stockholder approval for any particular issuance. For example, we could issue additional shares of common stock in the future in connection with one or more of the following (subject to laws, regulations or stock market rules that might require stockholder approval of certain transactions):

- financing transactions, such as public or private offerings of common stock or convertible securities;
- strategic investments;
- partnerships, collaborations and other similar transactions;
- debt or equity restructuring or refinancing transactions;
- acquisitions;
- stock splits or stock dividends; or
- any other proper corporate purposes.

The increase will also facilitate our ability to continue implementing our employee equity programs at competitive levels.

Potential Adverse Effects of Proposed Amendment

If this proposal is adopted, the additional authorized shares of common stock can be issued or reserved with approval of the Board at times, in amounts, and upon terms that the Board may determine, without additional stockholder approval. Stockholder approval of this proposal will not, by itself, cause any change in our capital accounts. However, any future issuance of additional shares of authorized common stock, or securities convertible into common stock, would ultimately result in dilution of existing stockholders' equity interests and could have a dilutive effect on book value per share and any future earnings per share. Dilution of equity interests could also cause prevailing market prices for our common stock to decline. Current stockholders (other than those who are party to specific rights agreements with us as described under "Transactions with Related Persons") will not have preemptive rights to purchase additional shares.

In addition to dilution, the availability of additional shares of common stock for issuance could, under certain circumstances, discourage or make more difficult any efforts to obtain control of Amyris. For example, significant stock and convertible security issuances in connection with a series of private-placement financing efforts since 2012 have resulted in further concentration of ownership of Amyris by related parties during the course of the year, and we expect to undertake additional financing efforts in 2014 and beyond involving issuances of securities to Total and, potentially, other related persons, as described in "Transactions with Related Persons." Such concentration of ownership could make it more difficult for an unrelated third party to undertake an acquisition of us. The Board is not aware of any actual or contemplated attempt to acquire control of Amyris and this proposal is not being presented with the intent that it be used to prevent or discourage any acquisition attempt. However, nothing would prevent the Board from taking any actions that it deems consistent with its fiduciary duties.

Risks to Stockholders of Non-Approval

Because our cash flow from operations has been negative, if the stockholders do not approve this proposal, the Board may be precluded from pursuing a wide range of potential corporate opportunities that might raise necessary cash or otherwise be in the best interests of Amyris and the best interests of our stockholders. This could have a material adverse effect on our business and prospects. We would also face substantial challenges in hiring and retaining employees at all levels, including our executive leadership team, in the near term.

Interests of Our Directors and Executive Officers in the Amendment

Some of our directors are affiliated with entities that may participate in future equity financings that will require issuance or reservation of shares authorized by the proposed amendment to our certificate of incorporation.

- Philippe Boisseau was designated to serve on the Board by Total under a letter agreement between Amyris and Total. Mr. Boisseau is an officer of Total S.A., an affiliate of Total, and, as discussed above, Total may acquire additional convertible promissory notes under an existing securities purchase agreement. As of March 15, 2014, Total beneficially owned 13,617,212 shares of our common stock, representing approximately 17.7% of our outstanding common stock. Also as of March 15, 2014, Total beneficially owned convertible promissory notes in an aggregate principal amount of approximately $78.3 million, which may become convertible into up to 24,880,769 shares of our common stock, inclusive of interest which may become convertible to equity (as described in more detail under "Transactions with Related Persons — Total Transactions" below). Under the securities purchase agreements between us and Total, if Total elects to maintain their participation in our fuels collaboration, we may be required to issue up to an additional $21.7 million in convertible promissory notes, which may become convertible into approximately an additional 5,279,805 shares of our common stock, assuming the amendment to the conversion price set forth in this Proxy Statement as part of Proposal 5 is approved by stockholders.

- Biolding, Maxwell, Naxyris SA and Sualk Capital Ltd. each of which has relationships to our directors as described above under "Proposal 1 — Election of Directors — Independence of Directors" all hold a right of first investment that allows them to participate in specified future securities offerings (pro rata based on their percentage ownership of then-outstanding common stock).

- Total holds pro rata rights with respect to specified future securities offerings as described under "Transactions with Related Persons — Total Transactions — Pro Rata Rights."

Text of Proposed Amendment

If this proposal is approved, we will amend our certificate of incorporation by replacing the current Article IV, Section 1 in its entirety as follows:

> "1. Total Authorized. The total number of shares of all classes of stock that the corporation has authority to issue is Three-Hundred and Five Million (305,000,000) shares, consisting of two classes: Three-Hundred Million (300,000,000) shares of Common Stock, \$0.0001 par value per share, and Five Million (5,000,000) shares of Preferred Stock, \$0.0001 par value per share."

The amendment will become effective when a certificate of amendment to the certificate of incorporation is filed with the Secretary of State of the State of Delaware.

Proposal 4 —
Ratification of Appointment of Independent Registered Public Accounting Firm

General

The Audit Committee has selected PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014, and has further directed that management submit the selection of an independent registered public accounting firm for ratification by the stockholders at the annual meeting. PricewaterhouseCoopers LLP has been engaged as our independent registered public accounting firm since December 2006. We expect representatives of PricewaterhouseCoopers LLP to be present at the annual meeting, and they will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither our bylaws nor other governing documents or law require stockholder ratification of the selection of our independent registered public accounting firm. However, the Audit Committee is submitting the selection of PricewaterhouseCoopers LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if they determine that such a change would be in the best interests of Amyris and our stockholders.

Vote Required and Board Recommendation

Ratification of the selection of PricewaterhouseCoopers LLP requires the affirmative vote of a majority of the votes of the holders of shares present in person or represented by proxy and entitled to vote at the annual meeting. Abstentions will be counted toward the vote total for the proposal and will have the same effect as negative votes.

The Board recommends a vote "FOR" this Proposal 4.

Independent Registered Public Accounting Firm Fee Information

During fiscal years 2013 and 2012, PricewaterhouseCoopers LLP served as our principal accountant for the audit of our annual financial statements and for the review of our financial statements included in our Quarterly Reports on Form 10-Q. The following table represents aggregate fees billed or to be billed to us by PricewaterhouseCoopers LLP for services performed for the fiscal years ended December 31, 2013 and December 31, 2012 (in thousands):

	Fiscal Year Ended	
Fee Category	**2013**	**2012**
Audit Fees	$1,527	$1,458
Audit-Related Fees	72	105
Tax Fees	9	10
All Other Fees	—	—
Total Fees	$1,608	$1,573

The "Audit Fees" category includes aggregate fees billed in the relevant fiscal year for professional services rendered for the audit of annual financial statements and review of financial statements included in Quarterly Reports on Form 10-Q, and for services that are normally provided in connection with statutory and regulatory filings or engagements for those fiscal years. The Audit Fees for fiscal year 2012 was updated to $1,458,000 from $1,368,000 as previously reported, to reflect the actual amount incurred for services rendered for that period.

The "Audit-Related Fees" category includes aggregate fees billed in the relevant fiscal year for assurance and related services that are reasonably related to the performance of the audit or review of financial statements and that are not reported under the "Audit Fees" category. The audit-related fees above include fees billed in the fiscal years ended December 31, 2013 and 2012 for attest services that are not required by statute or regulation and consultations concerning financial accounting and reporting standards. The audit-related fees above billed in the fiscal year ended December 31, 2012 included due diligence services relating to certain transactions.

The "Tax Fees" category includes aggregate fees billed in the relevant fiscal year for professional services for tax compliance, tax advice and tax planning. The fees related to tax services from PricewaterhouseCoopers LLP in the year ended December 31, 2012 related to annual income tax return review and annual transfer pricing calculations for our subsidiary, Amyris Brasil Ltda.

The "All Other Fees" category includes aggregate fees billed in the relevant fiscal year for products and services provided by the principal accountant other than the services reported under the other categories described above. We did not incur any fees in this category in the years ended December 31, 2013 or 2012.

Audit Committee Pre-Approval of Services Performed by our Independent Registered Public Accounting Firm

The Audit Committee's charter requires it to approve all fees and other compensation paid to, and pre-approve, all audit and non-audit services performed by, the independent registered public accounting firm. The charter permits the Audit Committee to delegate pre-approval authority to one or more members of the Audit Committee, provided that any pre-approval decision is reported to the Audit Committee at its next scheduled meeting. To date, the Audit Committee has not delegated such pre-approval authority.

In determining whether to approve audit and non-audit services to be performed by PricewaterhouseCoopers LLP, the Audit Committee takes into consideration the fees to be paid for such services and whether such fees would affect the independence of the independent registered public accounting firm in performing its audit function. In addition, when determining whether to approve non-audit services to be performed by PricewaterhouseCoopers LLP, the Audit Committee considers whether the performance of such services is compatible with maintaining the independence of PricewaterhouseCoopers LLP in performing its audit function, and confirms that the non-audit services will not include the prohibited activities set forth in Section 201 of the Sarbanes-Oxley Act of 2002. Except for the due diligence services described above under "Audit-Related Fees" and the tax services described above under "Tax Fees" (each of which were pre-approved by the Audit Committee in accordance with its policy) no non-audit services were provided by PricewaterhouseCoopers LLP in 2013 or 2012.

All fees paid to, and all services provided by, PricewaterhouseCoopers LLP during fiscal years 2013 and 2012 were pre-approved by the Audit Committee in accordance with the pre-approval procedures described above.

REPORT OF THE AUDIT COMMITTEE*

The Audit Committee has reviewed and discussed with management our audited consolidated financial statements for the fiscal year ended December 31, 2013. The Audit Committee has also discussed with PricewaterhouseCoopers LLP, our independent registered public accounting firm, the matters required to be discussed by the Statement on Auditing Standards No. 61, as amended (AICPA, Professional Standards, Vol. 1. AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T.

The Audit Committee has received and reviewed the written disclosures and the letter from PricewaterhouseCoopers LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with PricewaterhouseCoopers LLP its independence.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board that the audited consolidated financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 for filing with the Securities and Exchange Commission.

Amyris, Inc. Audit Committee of the Board
R. Neil Williams (Chair)
Geoffrey Duyk
Fernando Reinach

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* The material in this report is not "soliciting material," is not deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Amyris under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing unless expressly incorporated into such subsequent filing.

Proposal 5 —
Approval of the Issuance of up to $21,700,000 Aggregate Principal Amount of Senior Secured Convertible Promissory Notes in a Private Placement Transaction and the Issuance of the Common Stock Issuable Upon Conversion of Such Notes in Accordance with NASDAQ Marketplace Rule 5635.

General

As described in more detail below under "Transactions with Related Persons — Total Transactions," in July 2012 we amended our collaboration agreement with Total and in connection with such amendment we entered into a Securities Purchase Agreement with Total (which is an affiliate of our director, Philippe Boisseau, and who beneficially owned approximately 17.8% of our outstanding common stock as of December 31, 2013) dated July 30, 2012 (the "Total Purchase Agreement"), pursuant to which Total agreed to purchase $105 million in aggregate principal amount of convertible promissory notes, subject to the terms and conditions set forth in the Total Purchase Agreement. As of July 2013, we had issued $83.3 million in aggregate principal amount of convertible promissory notes to Total pursuant to the Total Purchase Agreement and $21.7 million in aggregate principal amount of senior secured convertible promissory notes remains subject to issuance to Total in accordance with the terms and conditions of the Total Purchase Agreement. These conditions include the provision that Total not elect in July 2014 not to proceed with the collaboration program with us, which we refer to as a "No-Go decision." We refer in this section to such remaining $21.7 million principal amount of secured convertible promissory notes, as the "Remaining Notes." The Remaining Notes are issuable in equal $10.85 million installments by no later than July 31, 2014 and January 31, 2015, respectively. See "Transactions with Related Persons — Total Transactions" for additional details on the funding history pursuant to the Total Purchase Agreement and the collaboration agreement.

Pursuant to a letter agreement entered into on April 1, 2014 and dated as of March 29, 2014 between Amyris and Total (the "March 2014 Letter Agreement"), we have agreed to (i) amend the conversion price of the Remaining Notes from $7.0682 to $4.11 (the "New Conversion Price") subject to stockholder approval of this Proposal 5, (ii) extend the period under which Total may exchange for other Amyris securities certain outstanding convertible promissory notes issued under the Total Purchase Agreement from June 30, 2014 to the later of December 31, 2014 and the date on which Amyris shall have raised $75 million of equity and convertible debt financing (excluding any convertible promissory notes issued pursuant to the Total Purchase Agreement), (iii) eliminate our ability to qualify, in a disclosure letter to Total, certain of the representations and warranties that we must make at the closing of any sale of the Remaining Notes, and (iv) provide Total with monthly reporting on our cash, cash equivalents and short-term investments. In consideration of these agreements, Total has agreed to waive its right not to consummate the closing of the issuance of the Remaining Notes if it decides not proceed with the collaboration and makes a "No-Go" decision with respect thereto, subject to our obtaining stockholder approval of the issuance of the Remaining Notes at the reduced conversion price.

We are asking stockholders to approve the issuance of the Remaining Notes with the New Conversion Price in accordance with NASDAQ Marketplace Rule 5635. The closing of the sale of the initial $10.85 million in aggregate principal amount of Remaining Notes is expected to occur upon satisfaction of certain closing conditions, including stockholder approval of the issuance of the Remaining Notes at the annual meeting, but by no later than July 31, 2014 and the closing of the sale of the remaining $10.85 million in aggregate principal amount of Remaining Notes is expected to occur upon satisfaction of certain closing conditions, including stockholder approval of the issuance of the Remaining Notes at the annual meeting, but by no later than January 31, 2015.

Vote Required and Board Recommendation

The proposal must receive a "For" vote from the holders of a majority of the shares of common stock casting votes in person or by proxy on Proposal 5 at the Special Meeting. Abstentions will be counted toward the vote total for the proposal and will have the same effect as an "Against" vote for this proposal. Shares represented by executed proxies that do not indicate a vote "For," "Against" or "Abstain" will be voted by the proxy holders "For" the adoption of the resolution. If you own shares through a bank, broker or other holder of record, you must instruct your bank, broker or other holder of record how to vote in order for them to vote your shares so that your vote can be counted on this proposal.

The Board recommends a vote "FOR" this Proposal 5.

The Board determined (with Mr. Boisseau abstaining from the discussion and the approval of the Board), upon the recommendation of the Audit Committee that Proposal 5 is advisable and in the best interest of our stockholders and recommended that our stockholders vote in favor of Proposal 5.

In reaching its determination to approve Proposal 5, the Audit Committee and Board, with advice from our management and legal advisors, considered a number of factors, including:

- the fact that the proceeds from the issuance of the Remaining Notes will enable us to advance our strategic direction;
- our financial condition, results of operations, cash flow and liquidity, including our outstanding debt obligations, which required us to raise additional capital for ongoing cash needs;
- our view that the proceeds from the issuance of the Remaining Notes will enhance our balance sheet;
- the fact that our management and certain of our directors have explored financing options with other potential investors and are not aware of an ability for us to obtain timely financing commitments needed for our ongoing cash requirements on comparable or better terms to the issuance of the Remaining Notes, or at all;
- the fact that the removal of the closing condition that Total does not make a "No-Go" decision increases the likelihood that the Remaining Notes will be issued; and
- the fact that our stockholders would have an opportunity to approve the issuance of the Remaining Notes at the new conversion price.

The Audit Committee and the Board also considered the following factors adverse to the issuance of the Remaining Notes:

- the fact that our stockholders who are not participating in the issuance of the Remaining Notes with the New Conversion Price may be diluted and the value of our common stock could be diluted upon conversion of the Remaining Notes;
- the fact that the reduced conversion price for Remaining Notes will, effectively, given the conversion terms, including a "make whole" provision, of the Remaining Notes, be at a discount to the market price on the date Amyris entered into the March 2014 Letter Agreement agreeing to issue the Remaining Notes at the reduced conversion price subject to the terms and conditions set forth therein and in the Total Purchase Agreement;
- the fact that the ownership by Total of a substantial percentage of our total voting power may make it more difficult and expensive for a third party to pursue a change of control of our company; and
- the fees and expenses to be incurred by us in connection with the issuance of the Remaining Notes.

In view of the variety of factors considered in connection with the evaluation of the issuance of the Remaining Notes with the New Conversion Price and the complexity of these matters, the Board did not find it practicable to, and did not, quantify or otherwise attempt to assign any relative weight to the various factors considered. In addition, in considering the various factors, individual members of the Board may have assigned different weights to different factors.

After evaluating these factors for and against the issuance of the Remaining Notes with the New Conversion Price, and based upon their knowledge of our business, financial condition and prospects, and the view of our management, following the separate approval and the recommendation of the Audit Committee, the Board concluded (with Mr. Boisseau abstaining from the discussion and the approval of the Board) that the issuance of the Remaining Notes with the New Conversion Price is in our best interest and in the best interests of our stockholders, and recommends that all stockholders vote "FOR" the approval of Proposal 5 at the Special Meeting.

Purpose of Proposal 5 — NASDAQ Stockholder Approval Requirement

Our common stock is listed on NASDAQ and trades under the ticker symbol (AMRS). The rules governing companies with securities listed on NASDAQ require stockholder approval prior to the issuance of securities when the issuance or potential issuance of securities will result in a change of control of Amyris. This requirement is set forth in NASDAQ Marketplace Rule 5635(b). NASDAQ defines a change of control as occurring when, as a result of an issuance, an investor or a group would own, or have the right to acquire 20% or more of the outstanding shares of common stock or voting power, and such ownership or voting power would be the largest ownership position. Under certain circumstances, Proposal 5 could result in Total being the largest owner of common stock of Amyris in an amount greater than 20%. While Total is currently the largest owner of outstanding common stock of Amyris, it may not be the largest owner of outstanding common stock at the time the Remaining Notes are issued, and the Remaining Notes could result in Total being deemed under NASDAQ rules to acquire greater than 20% of our outstanding shares.

By approving Proposal 5, you are approving the proposal for purposes of the requirements under NASDAQ Marketplace Rule 5635.

Terms of the Private Placement of the Remaining Notes

We have entered into the Total Purchase Agreement under which Total has remaining obligations to purchase up to $21.7 million aggregate principal amount of Remaining Notes with the New Conversion Price. We contemplate selling such Remaining Notes in two equal installments of $10.85 million by no later than July 31, 2014 and January 31 2015, respectively.

We are requesting in this Proposal 5 that our stockholders approve the issuance of the Remaining Notes with the New Conversion Price in a private placement transaction, and the issuance of the Common Stock issuable upon conversion of such Remaining Notes in accordance with NASDAQ Marketplace Rule 5635. The issuance and sale of such Remaining Notes are intended to be exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to the Regulation D "safe harbor" provisions of the Securities Act. Set forth below are the material terms of the private placement of the Remaining Notes.

THIS SUMMARY OF THE TERMS OF THE PRIVATE PLACEMENT OF THE REMAINING NOTES IS INTENDED TO PROVIDE YOU WITH BASIC INFORMATION CONCERNING SUCH PRIVATE PLACEMENT; HOWEVER, IT IS NOT INTENDED AS A SUBSTITUTE FOR REVIEWING THE TOTAL PURCHASE AGREEMENT, THE FORM OF REMAINING NOTE AND THE MARCH 2014 LETTER AGREEMENT IN THEIR ENTIRETY, WHICH WE HAVE INCLUDED AS ANNEXES A, B AND C, RESPECTIVELY, TO THIS PROXY STATEMENT. YOU SHOULD READ THIS SUMMARY TOGETHER WITH THESE DOCUMENTS.

Summary of the Terms of the Total Purchase Agreement

The agreements related to the Total Purchase Agreement, and the context for the funding by Total under that agreement, are described in detail in "The arrangements with Total are described in more detail below in this Proxy Statement under the caption "Transactions with Related Persons — Total Transactions." We and Total have entered into the Total Purchase Agreement which contains representations and warranties by us and Total to each other and is not intended to provide any other factual information about us.

Representations and Warranties. The Total Purchase Agreement contains representations and warranties by us and Total to each other and is not intended to provide any other factual information about us. We provided representations and warranties that we believe are customary for transactions of this nature for similar businesses. In addition, Total made representations and warranties to us that we believe are customary for transactions of this nature. The representations and warranties in the Total Purchase Agreement were made only for the purposes of the Total Purchase Agreement and solely for the benefit of the parties to the Total Purchase Agreement as of specific dates. The assertions embodied in the representations and warranties are subject to qualifications and limitations agreed to by the respective parties in connection with negotiating the terms of the Total Purchase Agreement. In addition, certain representations and warranties were made as of a specific date, may be subject to a contractual standard of materiality different from what might be viewed as material to stockholders, or may have been used for purposes of allocating risk between the respective parties rather than establishing matters as facts. Accordingly, you should not rely on the representations and warranties in the Total Purchase Agreement as characterizations of the actual state of facts about us and you should read the Total Purchase Agreement together with the other information concerning us that we publicly file in reports and statements with the SEC.

Conditions to Closing. As modified by the March 2014 Letter Agreement, the obligation of Total to purchase the Remaining Notes pursuant to the Total Purchase Agreement is subject to the satisfaction or waiver of specified conditions, including, but not limited to, the following:

- our stockholders shall have approved the issuance of the Remaining Notes with the New Conversion Price of $4.11;
- the representations and warranties made by us in the Total Purchase Agreement shall be true and correct in all respects as of the applicable closing of the sale of the Remaining Notes; and
- we shall have obtained all necessary third-party consents and approvals.

Description of Remaining Notes

Interest and Payment. The Remaining Notes shall bear interest at 1.50% per annum (subject to adjustment as provided in the Remaining Notes), accruing daily and payable in arrears at maturity or on conversion or a change of control where Total exercises a right to require us to repay the Remaining Notes. Should Amyris default on a Remaining Note, the interest rate on such note would increase to 2.5% per annum until such default is cured. Should Amyris fail to maintain NASDAQ listing status, the interest rate on such note would increase to 6% for the first 180 days of such failure and 9% thereafter. Accrued interest will be canceled if the Remaining Notes are canceled based on a "Go" decision at Total's option following the completion of the shareholders agreement we are to negotiate with Total following the completion of the Biofene development project between Amyris and Total.

Conversion. The Remaining Notes will be convertible into Amyris common stock (i) within 10 trading days prior to maturity (if it is not canceled prior to the maturity date based on a "Go" decision), (ii) on a change of control of Amyris, (iii) if Total is no longer our largest stockholder following a "No-Go" decision, and (iv) on our default.

Conversion Price. Subject to stockholder approval of this Proposal 5, the Remaining Notes will be convertible into Amyris common stock at a conversion price equal to $4.11, subject to proportional adjustment in the event of stock splits and combinations, certain dividends and distributions, reclassifications, exchanges or substitutions, and/or reorganizations, mergers, consolidations or asset sales affecting Amyris' common stock. No maximum number has been provided for the amount of shares that could be issuable on conversion of the Remaining Notes as a result of the potential adjustment of the conversion price.

Maturity. The Remaining Notes will mature and become payable on March 1, 2017, unless converted into our common stock or redeemed by Amyris prior to such time.

Final Go Decision. If Total makes a final "Go" decision, then the Remaining Notes will be exchanged by Total for equity interests in the fuels joint venture contemplated by the collaboration with us, after which the Remaining Notes will not be convertible and any obligation to pay principal or interest on the Remaining Notes will be extinguished. If Total makes a "No-Go" or a partial "Go" decision, all or a portion of the outstanding Remaining Notes will remain outstanding and become payable at maturity.

Change of Control. Upon the occurrence of a change of control of Amyris prior to the maturity date of the Remaining Notes, the holder will have the right to require Amyris to repurchase all or any part of the Remaining Notes at an offer price in cash equal to 101% of the face value of the Remaining Notes, plus any accrued and unpaid interest.

Events of Default. The Remaining Notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the Remaining Notes and Total Purchase Agreement, with added default interest rates and associated cure periods applicable to the covenant regarding SEC reporting.

Covenants. The Remaining Notes and the Total Purchase Agreement include covenants regarding payment of interest, maintenance of our listing status, limitations on debt, maintenance of corporate existence, and filing of reports with the SEC.

Security Interest. Our obligations under the Remaining Notes will be secured a lien on our equity interest in the joint venture entity that we have formed with Total (see below under "Transactions with Related Persons — Total Transactions" for additional details) as well as certain collateral pursuant to a pledge agreement entered into by us in favor of the holder of the Remaining Note.

Use of Proceeds

We currently intend to use the net proceeds from the private placement of the Remaining Notes to fund the Biofene collaboration under the terms of the collaboration agreement with Total, as amended.

Potential Adverse Effects of Proposed Amendment — Dilution and Impact of the Private Placement of the Remaining Notes on Existing Stockholders

The private placement of the Remaining Notes with the New Conversion Price could have a dilutive effect on current stockholders who are not participating in such private placement in that the percentage ownership of Amyris held by such current stockholders will decline as a result of the issuance of the common stock issuable upon conversion or exercise of the Remaining Notes. This means also that our current stockholders who are not participating in such private placement will own a smaller interest in us as a result of such private placement and therefore have less ability to influence significant corporate decisions requiring stockholder approval. Issuance of the common stock issuable upon conversion or exercise of the Remaining Notes could also have a dilutive effect on book value per share and any future earnings per share. Dilution of equity interests could also cause prevailing market prices for our common stock to decline.

Because of the conversion price adjustments contained in the Remaining Notes, the exact magnitude of the dilutive effect of the Remaining Notes cannot be conclusively determined. However, the dilutive effect may be material to current stockholders of Amyris. By way of example, assuming the sale and issuance of the full $21.7 million principal amount of Remaining Notes and assuming the New Conversion Price of $4.11, then approximately 5.3 million shares of Amyris' common stock will be issuable upon conversion of the Remaining Notes, assuming no further adjustment of the conversion price pursuant to the terms of the Remaining Notes, compared to approximately 3.1 million shares that would be issuable upon conversion of such Remaining Notes if the conversion price remained unchanged at $7.0682. Note however that the Remaining Notes, other than with respect to price adjustments for certain dividends and distributions, do not provide for a floor on the downwards adjustments to the conversion price of the Remaining Notes. As a result, the number of shares issuable upon conversion of the Remaining Notes could be significantly larger than this example.

In addition to dilution, the existence of additional convertible debt could, under certain circumstances, discourage or make more difficult our efforts to obtain additional financing.

Risks to Stockholders of Non-Approval

If the stockholders do not approve this Proposal 5, Total's obligation to purchase the Remaining Notes will continue to be subject to its right to make a "No-Go decision," and if it does so it will not be obligated to purchase the remaining $21.7 million of secured convertible promissory notes. In the event that Total were to make a No-Go Decision, we may have to seek to renegotiate financing terms with Total and/or look for alternative capital investments. We may not be able to complete any such renegotiation, nor can we be certain that any such capital investments would be available on favorable terms or at all. Failure to raise additional capital investment would have a material adverse effect on our business and prospects.

If the stockholders do not approve this Proposal 5, we would still be able to issue to Total the Remaining Notes with the original conversion price of $7.0682 if all other closing conditions in the Total Purchase Agreement are met and Total does not make a “No-Go” decision.

Interests of Certain Persons in the Private Placement

When you consider the Board’s recommendation to vote in favor of Proposal 5, you should be aware that our directors and executive officers and existing stockholders may have interests in the issuance of the Remaining Notes that may be different from, or in addition to, the interests of other of our stockholders. In particular, our director Philippe Boisseau is affiliated with Total. Mr. Boisseau is an affiliate of Total and Total’s beneficial ownership of Amyris’ securities as of March 15, 2014 is outlined below in the Section titled *Security Ownership of Certain Beneficial Owners and Management*.

Because of the conversion price adjustments contained in the Remaining Notes, the exact number of shares issuable to Total on conversion of the Remaining Notes cannot be conclusively determined. The interests to be acquired by Total may be of material interest to Amyris’ stockholders in considering Proposal 5. Assuming the closing conditions for the sale of the Remaining Notes are satisfied and Total purchases its full maximum commitment of $21.7 million principal amount of Remaining Notes and assuming the conversion prices of such notes remain unchanged from the New Conversion Price of $4.11 then approximately 5.3 million shares of Amyris’ common stock will be issuable upon conversion of the Remaining Notes purchased by Total. As a result, Total could significantly increase its ownership interests in Amyris upon conversion of the Remaining Notes.

The issuance of the Remaining Notes was separately approved by the Audit Committee, and Mr. Boisseau was not a member of, nor participated in, any meetings of the Audit Committee in regards to the issuance of the Remaining Notes.

Corporate Governance

Corporate Governance Principles

The Board has adopted written Corporate Governance Principles to provide the Board and its committees with operating principles designed to enhance the effectiveness of the Board and its committees, to establish good Board and Committee governance, and to establish the responsibilities of management and the Board in supporting the Board's activities. The Corporate Governance Principles set forth a framework for Amyris' governance practices, including composition of the Board, director nominee selection, Board membership criteria, director compensation, Board education, meeting responsibilities, access to employees and information, executive sessions of independent directors, standing Board committees and their functions, and responsibilities of management.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all directors, officers and employees of Amyris as required by NASDAQ governance rules. Our Code of Business Conduct and Ethics includes a section entitled "Code of Ethics for Chief Executive Officer and Senior Financial Officers," providing additional principles for ethical leadership and a requirement that such individuals foster a culture throughout Amyris that helps ensure the fair and timely reporting of our financial results and condition. Our Code of Business Conduct and Ethics is available on the corporate governance section of our website at http://investors.amyris.com/governance.cfm. Stockholders may also obtain a print copy of our Code of Business Conduct and Ethics and our Corporate Governance Guidelines by writing to the Secretary of Amyris at 5885 Hollis Street, Suite 100, Emeryville, California 94608. If we make any substantive amendments to, or waivers from, a provision of our Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, we will promptly disclose the nature of the amendment or waiver on the corporate governance section of our website at http://investors.amyris.com/governance.cfm.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information with respect to the beneficial ownership of our common stock, as of March 15, 2014, by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our voting securities;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes any shares over which the individual or entity has sole or shared voting power or investment power. These rules also treat as outstanding all shares of capital stock that a person would receive upon exercise of stock options held by that person that are immediately exercisable or exercisable within 60 days of the date on which beneficial ownership is determined. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the number of shares beneficially owned and the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The information does not necessarily indicate beneficial ownership for any other purpose. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, to our knowledge the persons named in the table below have sole voting and investment power with respect to all shares of common stock attributed to them in the table.

Information with respect to beneficial ownership has been furnished to us by each director and executive officer and certain stockholders, and derived from publicly-available SEC beneficial ownership reports on Forms 3 and 4 and Schedules 13G filed by covered beneficial owners of our common stock. Percentage ownership of our common stock in the table is based on 77,038,444 shares of our common stock outstanding on March 15, 2014. Except as otherwise set forth below, the address of the beneficial owner is c/o Amyris, Inc., 5885 Hollis Street, Suite 100, Emeryville, California 94608.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information with respect to the beneficial ownership of our common stock, as of March 15, 2014, by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our voting securities;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes any shares over which the individual or entity has sole or shared voting power or investment power. These rules also treat as outstanding all shares of capital stock that a person would receive upon exercise of stock options held by that person that are immediately exercisable or exercisable within 60 days of the date on which beneficial ownership is determined. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the number of shares beneficially owned and the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The information does not necessarily indicate beneficial ownership for any other purpose. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, to our knowledge the persons named in the table below have sole voting and investment power with respect to all shares of common stock attributed to them in the table.

Information with respect to beneficial ownership has been furnished to us by each director and executive officer and certain stockholders, and derived from publicly-available SEC beneficial ownership reports on Forms 3 and 4 and Schedules 13G filed by covered beneficial owners of our common stock. Percentage ownership of our common stock in the table is based on 77,038,444 shares of our common stock outstanding on March 15, 2014. Except as otherwise set forth below, the address of the beneficial owner is c/o Amyris, Inc., 5885 Hollis Street, Suite 100, Emeryville, California 94608.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned (#)	Percent Of Class (%)
5% Stockholders		
Total Gas & Power USA, SAS[(1)]	13,617,212	17.7
Maxwell (Mauritius) Pte Ltd.[(2)]	10,353,478	13.4
Entities affiliated with FMR LLC[(3)]	7,623,765	9.9
Biolding Investment SA[(4)]	7,484,601	9.7
Naxyris SA[(5)]	5,639,398	7.3
Entities affiliated with Kleiner Perkins Caufield & Byers[(6)]	4,183,224	5.4
TPG Biotechnology Partners II, L.P.[(7)]	3,978,660	5.2
Directors and Named Executive Officers		
John Melo[(8)]	1,100,998	1.4
Philippe Boisseau[(1)(9)]	13,617,212	17.7
Nam-Hai Chua[(2)(10)]	20,666	*
John Doerr[(6)(11)]	7,033,159	9.1
Geoffrey Duyk[(7)(12)]	22,333	*
Arthur Levinson[(13)]	369,864	*
Carole Piwnica[(5)(14)]	38,000	*
Fernando de Castro Reinach[(15)]	208,397	*
HH Sheikh Abdullah bin Khalifa Al Thani[(4)(16)]	7,506,934	9.7
R. Neil Williams[(17)]	6,666	*
Joel Cherry[(18)]	449,960	*
Paulo Diniz[(19)]	258,333	*
Zanna McFerson[(20)]	158,174	*
Gary Loeb[(21)]	5,056	*
Steven Mills[(22)]	199,727	*
All Directors and Executive Officers as a Group (13 Persons)[(23)]	30,952,027	39.09

* Represents beneficial ownership of less than 1%.

(1) The address of Total Gas & Power USA, SAS is 2, Place Jean Millier, 92078 Paris La Défense CEDEX, France.

(2) Maxwell (Mauritius) Pte Ltd (or Maxwell) is wholly owned by Cairnhill Investments (Mauritius) Pte Ltd, which is wholly owned by Fullerton Management Pte Ltd, which is wholly owned by Temasek Holdings (Private) Limited. Each of these entities possesses shared voting and investment control over the shares held by Maxwell. The address of for these entities is 60B Orchard Road, #06-18 Tower 2, The Atrium @ Orchard, Singapore 238891.

(3) Fidelity Management & Research Company (or Fidelity), a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, beneficially owns all of such shares of common stock as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940.

Each of Edward C. Johnson 3d and FMR LLC, through its control of Fidelity and such funds, has sole power to dispose of the shares owned by such funds. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d, Chairman of FMR LLC, has the sole power to vote or direct the voting of the shares owned directly by the Fidelity funds holding such securities, which power resides with the funds' Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the funds' Boards of Trustees. The address for these entities is 82 Devonshire Street, Boston, Massachusetts 02109.

(4) Biolding Investment SA is indirectly owned by HH Sheikh Abdullah bin Khalifa Al Thani, who shares voting and investment control over the shares held by such entity. The address for Biolding Investment SA is 11A Boulevard Prince Henri, L-1724, Luxembourg.

(5) Naxyris SA, an investment vehicle owned by Naxos Capital Partners SCA Sicar. Ms. Piwnica is Director of NAXOS UK, which is affiliated with Naxos Capital Partners SCA Sicar. Ms. Piwnica disclaims beneficial ownership of all shares of Amyris common stock that are or may be beneficially owned by Naxyris SA or any of its affiliates. The address for Naxyris SA is 40 Boulevard Joseph II, L-1840, Luxembourg.

(6) Includes 3,724,558 shares of common stock held by Kleiner Perkins Caufield & Byers XII, LLC (or KPCB XII) and, 67,952 shares held by KPCB XII Founders Fund, LLC (or KPCB XII Founders), 144,707 shares beneficially held by Clarus, LLC, whose manager is L. John Doerr, and 246,007 shares held by other individual managers. KPCB XII Associates, LLC is the managing member of KPCB XII, KPCB XII Founders and Clarus, LLC, and, as such, may also be deemed to possess sole voting and investment control over the shares held by such entities. Mr. Doerr is a manager of the KPCB XII Associates, LLC and, as such, has shared voting and investment control over the shares held by these entities. Mr. Doerr disclaims beneficial ownership of these shares except to the extent of his pecuniary interest therein. The shares are held for convenience in the name of "KPCB Holdings, Inc. as nominee" for the account of entities affiliated with Kleiner Perkins Caufield & Byers and others. KPCB Holdings, Inc. has no voting, dispositive or pecuniary interest in any such shares. The address for Mr. Doerr and these entities is 2750 Sand Hill Road, Menlo Park, California 94025.

(7) Includes 3,933,590 shares of common stock (or the TPG Stock) held by TPG Biotechnology Partners II, L.P. (or Partners II), a Delaware limited partnership, whose general partner is TPG Biotechnology GenPar II, L.P., a Delaware limited partnership, whose general partner is TPG Biotechnology GenPar II Advisors, LLC, a Delaware limited liability company (or GenPar II Advisors). Also includes 45,070 shares directly held by TPG Biotechnology Partners III, L.P., a Delaware limited partnership whose general partner is TPG Biotechnology GenPar III, L.P., a Delaware limited partnership, whose sole member is GenPar III Advisors, LLC, a Delaware limited liability company (or GenPar III Advisors). Each of Gen Par II Advisors' and GenPar III Advisors' sole member is TPG Holdings I, L.P., a Delaware limited partnership, whose general partner is TPG Holdings I-A, LLC, a Delaware limited liability company, whose sole member is TPG Group Holdings (SBS), L.P., a Delaware limited partnership, whose general partner is TPG Group Holdings (SBS) Advisors, Inc., a Delaware corporation (or Group Advisors). Messrs. David Bonderman and James G. Coulter are directors, officers and sole shareholders of Group Advisors, and may therefore be deemed to beneficially own the TPG Stock. Messrs. Bonderman and Coulter disclaim beneficial ownership of the TPG Stock except to the extent of their pecuniary interest therein. Dr. Duyk is a partner of TPG Biotech. TPG Biotech is affiliated with TPG Biotechnology Partners II, L.P. Dr. Duyk disclaims beneficial ownership of all of the TPG Stock that is or may be beneficially owned by Partners II or any of its affiliates. The address for each of Group Advisors and Messrs. Bonderman and Coulter is c/o TPG Global, LLC, 301 Commerce Street, Suite 3300, Fort Worth, TX 76102.

(8) Shares beneficially owned by Mr. Melo include (i) 6,828 shares of common stock, (ii) 296,334 restricted stock units, all of which were unvested as of March 15, 2014, and (iii) 797,836 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014. If these options were exercised in full, 59,601 of these shares would be subject to vesting and a right of repurchase in our favor upon Mr. Melo's cessation of service prior to vesting.

(9) Shares beneficially owned by Mr. Boisseau represent 13,617,212 shares of common stock held by Total Gas & Power USA, SAS. Mr. Boisseau is a member of the Executive Committee of Total S.A., the ultimate parent company of Total Gas & Power USA, SAS, and, as such, may be deemed to share voting or investment power over the securities held by Total Gas & Power USA, SAS. Mr. Boisseau holds no shares of Amyris directly and disclaims beneficial ownership of the common stock, except to the extent of his pecuniary interest therein, if any.

(10) Shares beneficially owned by Dr. Chua include (i) 3,000 shares of common stock, (ii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014 and (iii) 17,666 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014. Dr. Chua was designated to serve as our director by Maxwell. Dr. Chua is not an affiliate of Maxwell and disclaims beneficial ownership of all shares of Amyris common stock that are or may be beneficially owned by Maxwell or any of its affiliates.

(11) Shares beneficially owned by Mr. Doerr include (i) 6,000 shares of common stock, (ii) 3,049,439 shares of common stock held by Foris Ventures, LLC, in which Mr. Doerr indirectly owns all of the membership interests, (iii) 8,503 shares of common stock held by The Vallejo Ventures Trust U/T/A 2/12/96, of which Mr. Doerr is a trustee, (iv) 4,183,224 shares of common stock held by entities affiliated with Kleiner Perkins Caufield & Byers of which Mr. Doerr is an affiliate, excluding 246,007 shares over which Mr. Doerr has no voting or investment power, (v) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (vi) 32,000 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(12) Shares beneficially owned by Dr. Duyk include (i) 3,000 shares of common stock, (ii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (ii) 19,333 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014. Dr. Duyk is a partner of TPG Biotech. TPG Biotech is affiliated with TPG Biotechnology Partners II, L.P. Dr. Duyk disclaims beneficial ownership of all of the TPG Stock that is or may be beneficially owned by Partners II or any of its affiliates.

(13) Shares beneficially owned by Dr. Levinson include (i) 217,864 shares of common stock, (ii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (iii) 152,000 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(14) Shares beneficially owned by Ms. Piwnica include (i) 6,000 shares of common stock, (ii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (iii) 32,000 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014. Ms. Piwnica is Director of NAXOS UK, a consulting firm advising private equity and was designated to serve as our director by Naxyris SA, an investment vehicle owned by Naxos Capital Partners SCA Sicar. NAXOS UK is affiliated with Naxos Capital Partners SCA Sicar. Ms. Piwnica disclaims beneficial ownership of all shares of Amyris common stock that are or may be beneficially owned by Naxyris SA or any of its affiliates.

(15) Shares beneficially owned by Dr. Reinach include (i) 6,000 shares of common stock, (ii) 170,397 shares of common stock held by Sualk Capital Ltd, an entity for which Dr. Reinach serves as sole director, (iii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (iv) 32,000 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(16) Shares beneficially owned by His Highness include (i) 3,000 shares of common stock, (ii) 7,484,601 shares of common stock held by Biolding Investment SA, an entity indirectly owned by His Highness, (iii) 3,000 restricted stock units, all of which were unvested as of March 15, 2014, and (iv) 19,333 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(17) Shares beneficially owned by Mr. Williams include (i) 3,000 restricted stock units all of which were unvested as of March 15, 2014 and (ii) 6,666 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(18) Shares beneficially owned by Dr. Cherry include (i) 31,504 shares of common stock, (ii) 155,333 restricted stock units, all of which were unvested as of March 15, 2014, and (iii) 263,123 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014. If these options were exercised in full, 2,000 of these shares would be subject to vesting and a right of repurchase in our favor upon Dr. Cherry's cessation of service prior to vesting.

(19) Shares beneficially owned by Mr. Diniz include (i) 56,667 shares of common stock, (ii) 30,001 restricted stock units, all of which were unvested as of March 15, 2014, and (iii) 184,999 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(20) Shares beneficially owned by Ms. McFerson include (i) 49,841 shares of common stock and (ii) 58,333 shares of common stock issuable upon exercise of options that were exercisable within 60 days of March 15, 2014.

(21) Mr. Loeb ceased serving as an executive officer in July 2013 and his employment terminated in July 2013; beneficial ownership information in this table is based on a questionnaire completed by Mr. Loeb or the most recent Section 16 filings by Mr. Loeb and our internal equity plan records.

(22) Mr. Mills ceased serving as an executive officer in December 2013 and his employment terminated in December 2013; beneficial ownership information in this table is based on a questionnaire completed by Mr. Mills or the most recent Section 16 filings by Mr. Mills and our internal equity plan records.

(23) Shares beneficially owned by all our executive officers and directors as a group include the shares of common stock described in footnotes (8) through (22) above.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and any person or entity who owns more than ten percent of a registered class of our common stock or other equity securities, to file with the Securities and Exchange Commission certain reports of ownership and changes in ownership of our securities. Executive officers, directors and stockholders who hold more than ten percent of our outstanding common stock are required by the Securities and Exchange Commission to furnish us with copies of all Section 16(a) forms they file. Based solely on review of this information and written representations by our executive officers and directors that no other reports were required, we believe that, during 2013, no reporting person failed to file the forms required by Section 16(a) of the Exchange Act on a timely basis.

Executive Compensation

Compensation Discussion and Analysis

The following discussion describes and analyzes our compensation for our named executive officers for 2013 and should be read in conjunction with the compensation tables contained elsewhere in this Proxy Statement. Our stockholders adopted a three year interval for “management say on pay” review. Accordingly, our stockholders last voted on the matter at our Annual Meeting in 2011 and approved, on an advisory basis, the compensation of our named executive officers. Our existing compensation policies and decisions are consistent with our compensation philosophy and objectives discussed below and align the interests of our named executive officers with Amyris’ short and long term goals.

The “named executive officers” include our President and Chief Executive Officer, our interim Chief Financial Officer, our two other most highly compensated executive officers (as set forth in the “Summary Compensation Table” below) who were serving as executive officers at the end of 2013, and two members of our management who would have been named executive officers but for the fact that they were no longer executive officers at the end of 2013. Accordingly, this Compensation Discussion and Analysis describes our 2013 executive compensation program and 2013 compensation policies and decisions for:

- John Melo, President and Chief Executive Officer
- Paulo Diniz, interim Chief Financial Officer
- Joel Cherry, President, Research and Development
- Zanna McFerson, Chief Business Officer
- Gary Loeb, Former Senior Vice President and General Counsel
- Steven Mills, Former Chief Financial Officer

Ms. McFerson joined us as our Chief Business Officer and was designated as an executive officer in March 2013. Mr. Loeb, who served as our General Counsel since 2012, and prior to that, served as our Senior Corporate Counsel, departed in July 2013 and Mr. Mills, who served as our Chief Financial Officer since 2012 departed in December 2013.

Amyris is an integrated renewable products company focused on providing sustainable alternatives to a broad range of petroleum-sourced products. We use our industrial synthetic biology platform to convert plant sugars into a variety of hydrocarbon molecules — flexible building blocks that can be used in a wide range of products. Our business model is focused on sales of renewable products as well as inflows from collaborations. Our initial portfolio of commercial products has been based on Biofene®, our brand of renewable farnesene, a long-chain branched hydrocarbon. We are commercializing these products both as renewable ingredients in cosmetics, flavors and fragrances, and consumer products, and, with our joint venture partners, as renewable lubricants, diesel and jet fuel. We are also commercializing our initial fragrance oil molecule and expect additional molecules to be produced in the coming years. Collaborations are the other core value creation element of our business model. We engage in research and development collaborations with various partners for new applications or molecules. These collaborations provide us with upfront funding to build strong technical partnerships intended to result in product commercialization and sales. Collaborations also generate a longer-term cash stream as we capture a portion of the gross margin from the value chain of the product. In 2013, we continued to raise funds through securities offerings to finance our operations until we achieve significant revenues from sales of our renewable products. Our success depends, among other things, on attracting and retaining executive officers with experience and skills in a number of different areas as we continue to drive improvements in our technology platform and production process, pursue and establish key commercial relationships, develop and commercialize products, and establish a reliable supply chain and manufacturing organization.

Compensation Philosophy and Objectives and Elements of Compensation

The primary objectives of our compensation program in 2013 were to:

- Attract, retain, and motivate highly talented employees that are key to Amyris' success;
- Reinforce our core values and foster a sense of ownership, urgency and entrepreneurial spirit;
- Link compensation to individual, team, and company performance (as appropriate by employee level);
- Emphasize performance-based compensation for individuals who can most directly impact stockholder value; and
- Provide exceptional pay for delivering exceptional results.

As discussed above, our business continues to be in an early stage of development with cash management being one key consideration for our strategy and operations. Accordingly, for 2013, we intended to provide a competitive compensation program that would enable us to attract and retain the top executives and employees necessary to develop our business, while being prudent in the management of our cash and equity. Based on this approach, we continued to aim to balance and reward annual and long-term performance with a total compensation package that included a mix of both cash and equity. Our compensation program was intended to align the interests of management, key employees and stockholders and to encourage the creation of stockholder value by providing long-term incentives through equity ownership. We continue to adhere to this general compensation philosophy for 2014.

Our intent and philosophy in designing compensation packages at the time of hiring of new executives was based on providing compensation that we thought was sufficient to enable us to attract the necessary talent within prudent limitations as discussed above. Compensation of our executive officers after the initial period following their hiring has been influenced by the amounts of compensation that we initially agreed to pay them as well as by our evaluation of their subsequent performance, changes in their levels of responsibility, retention considerations, prevailing market conditions, the financial condition and prospects of our company, and our attempt to maintain some level of internal pay parity in the compensation of existing executives relative to the compensation paid to more recently hired executives.

We have compensated our executives with a combination of salaries, cash bonuses and equity awards. We believe this combination of cash and equity, subject to strategic allocation among such components, is largely consistent with the forms of compensation provided by other companies with which we compete for executive talent, and as such is a package that matches the expectations of our executives and of the market for executive talent. We also believe that it provides an appropriate blend of compensation to retain our executives, reward them for performance in the short term and induce them to contribute to the creation of value in Amyris over the long term. We view the different components of our executive compensation as distinct, each serving particular functions in furthering our compensation philosophy and objectives, and together providing a holistic approach to achieving such philosophy and objectives.

Base Salary. We believe we must maintain base salary levels that are sufficiently competitive to position us to attract the executives we need and that it is important for our executives to perceive that over time they will continue to have the opportunity to earn a salary that they regard as competitive. The Leadership Development and Compensation Committee reviews and adjusts, as appropriate, the base salaries of our executives on an annual basis, and makes decisions with respect to the base salaries of new executives at the time of hire. In making such determinations, the committee considers many factors, including our overall financial performance, the individual performance of the executives in question, the executive's potential to contribute to our annual and longer-term strategic goals, the executive's scope of responsibilities and experience, competitive market practices for base salary, and internal pay parity.

Cash Bonuses. We believe the ability to earn cash bonuses should provide incentives to executives to effectively pursue goals established by the Board and should be regarded by executives as appropriately rewarding effective performance against these goals. For 2013, the Leadership Development and Compensation Committee adopted a cash bonus plan for our executive officers, the details of which are described below under "2013 Compensation." The 2013 cash bonus plan included company performance goals and individual goals and was structured to motivate our executive officers to achieve our short-term financial and operational goals and to reward exceptional company and individual performance. In particular, our 2013 cash bonus plan was designed to provide incentives to our executive officers to achieve 2013 company financial and operational targets, together with various key individual operational objectives. In general, target bonuses for executives are first set in their offer letters based on similar factors as those described above with respect to the determination of initial base salary at the time of hire. For subsequent years, target bonuses for executives may be adjusted by the Leadership Development and Compensation Committee based on various factors, including any modifications to base salary, competitive market practices and other considerations described above with respect to adjustments in executive base salaries.

Equity Awards. Our equity awards are also designed to be sufficiently competitive to allow us to attract executives. In fiscal year 2013, we granted stock option and restricted stock unit equity awards to executive officers. Option awards for executive officers are granted with an exercise price equal to the fair market value of our common stock on the date of grant; accordingly, such option awards will have value to our named executive officers only if the market price of our common stock increases after the date of grant. Under our 2010 Equity Incentive Plan, the fair market value of our common stock is the closing price of our common stock on NASDAQ on the date of determination. Restricted stock units represent the right to receive full-value shares of our common stock without payment of any exercise price. Shares of our common stock are not issued when a restricted stock unit award is granted; instead, once a restricted stock unit award vests, one share of our common stock is issued for each vested restricted stock unit. Generally, we grant smaller restricted stock unit awards as compared to option awards because restricted stock units have a greater fair value per share than options. The distribution of value between the options and restricted stock units for our executives is based on a review of market practices. Restricted stock units are also awarded selectively to key personnel to provide a source of equity compensation that retains value despite stock volatility.

We typically grant option awards with four-year vesting schedules (vesting monthly over four years). Stock option grants include a one year "cliff", where the option vests as to 25% of the shares after one year, and monthly thereafter. Our restricted stock unit awards generally vest and become exercisable over three years on an annual basis. We believe such vesting schedules are generally consistent with the option and restricted stock unit award granting practices of our public company peers. The Leadership Development and Compensation Committee has approved variations to these vesting schedules for options and restricted stock units in connection with new-hire negotiations with senior management candidates, including executive officers.

We grant equity awards to our executive officers in connection with their hiring. The size of initial equity awards has been determined based on the executive's position with us and takes into consideration the executive's base salary and other compensation as well as an analysis of the grant and compensation practices of the companies that participate in the survey that we have reviewed in the past (described in more detail below) in connection with establishing our overall compensation policies. The initial equity awards are generally intended to provide the executive with an incentive to build value in the organization over an extended period of time, while remaining consistent with our overall compensation philosophy. Insofar as we have to date incurred operating losses and consumed substantial amounts of cash in our operations, and to compensate for cash salaries and cash bonus opportunities that were, in certain cases, lower than those offered by other employers, we have sought to attract executives to join us by granting equity awards that would have the potential to provide significant value if we are successful.

We may also grant additional equity awards in recognition of commendable performance and in connection with a significant change in responsibilities. Further, equity awards are a component of the annual compensation package of our executive officers. In 2013, the Leadership Development and Compensation Committee granted equity awards based on input from management regarding performance, retention and other considerations. In approving awards, the Leadership Development and Compensation Committee has taken into account various factors, including the responsibilities, past performance and anticipated future contribution of the executive officer, the executive's overall compensation package and the executive's existing equity holdings in Amyris.

Role of Stockholder Say-on-Pay Votes. At our 2011 Annual Meeting of Stockholders, we provided our stockholders with the opportunity to cast an advisory vote on our executive compensation program (commonly referred to as a "say-on-pay proposal"). A majority of the votes cast on our say-on-pay proposal at that meeting were voted in favor of the non-binding advisory resolution approving the compensation of our named executive officers. The Leadership Development and Compensation Committee believes this affirms our stockholders' support of our approach to executive compensation, and, accordingly, did not change its approach to executive compensation in 2011, 2012 or 2013 in connection with the say-on-pay proposal vote. Further, at our 2011 Annual Meeting of Stockholders, the stockholders cast an advisory vote that future say-on-pay votes should occur once every three years. Our triennial say-on-pay proposal is being submitted to stockholders for an advisory vote at this year's annual meeting of stockholders as Proposal No. 2 as described in this Proxy Statement. The Leadership Development and Compensation Committee will take into consideration the outcome of Proposal No. 2 when making future compensation decisions for our named executive officers.

Compensation Policies and Practices As They Relate to Risk Management

Our Leadership Development and Compensation Committee determined, through discussions with management and Compensia at committee meetings held in February 2013 and February 2014, that our policies and practices of compensating our employees, including executive officers, are not reasonably likely to have a material adverse effect on us. The assessments conducted by the committee focused on the key terms of our bonus payments and equity compensation programs in 2013, and our plans for such programs in 2014. Among other things, the committee focused on whether our compensation programs created incentives for risk-taking behavior and whether existing risk mitigation features were sufficient in light of the overall structure and composition of our compensation programs. Among other things, the Committee considered the following aspects of our overall compensation program:

- We believe our base salaries are in general high enough to provide our employees with sufficient income so that they do not generally need bonus income to meet their basic cost of living.
- Cash bonus targets are typically 10 – 20% of most employees' base salaries (30 – 80% for executives), which provides balanced incentives for performance, but does not encourage excessive risk taking to achieve such goals.
- For key employees, our 2013 bonus plan (and planned 2014 bonus plan) emphasizes company performance over individual objectives and total bonus funding available for payout in a given year is capped at 150%.
- We do not provide any significant commission or similar compensation programs to any of our employees.
- For our executives, we target the 40^{th} percentile of our peer group for cash compensation and the 75^{th} percentile for equity compensation, which vests over three to four years, providing our executives with significant incentives for the longer-term success of Amyris.

Based on these considerations the committee determined that our compensation programs, including our executive and non-executive compensation programs, provide an appropriate balance of incentives and do not encourage our executives or other employees to take excessive risks or otherwise create risks that are likely to have a material adverse effect on us.

Role of Compensation Consultant. In connection with an annual review of executive compensation programs for 2013, the Leadership Development and Compensation Committee retained Compensia, a compensation consulting firm, to provide it with advice and guidance on our executive compensation policies and practices and to provide relevant information about the executive compensation practices of similarly situated companies. In 2013, Compensia assisted in the preparation of compensation materials for executive compensation proposals in advance of Leadership Development and Compensation Committee meetings, including 2013 compensation levels for executives and the design of our cash bonus, equity, severance and change of control programs and other executive benefit programs. Compensia also reviewed and advised the Leadership Development and Compensation Committee on compensation materials relating to executive compensation prepared by management for committee consideration. In addition, in the fourth quarters of 2011and 2012, Compensia assisted the Leadership Development and Compensation Committee in developing and adopting an updated compensation peer group for 2012 and 2013 (discussed below). The Leadership Development and Compensation Committee retained Compensia again in the fourth quarter of 2013 to provide assistance with respect to our 2014 compensation planning, including updates to the compensation peer group.

Compensia, under the direction of the Leadership Development and Compensation Committee, may continue to periodically conduct a review of the competitiveness of our executive compensation programs, including base salaries, cash bonus compensation, equity awards and other executive benefits, by analyzing the compensation practices of companies in our compensation peer group, as well as data from third-party compensation surveys. Generally, the Leadership Development and Compensation Committee uses the results of such analyses to assess the competitiveness of our executives' total compensation, and to determine whether each element of such total compensation is properly aligned with reasonable and responsible practices among our peers.

The Leadership Development and Compensation Committee also retained Compensia for assistance in reviewing and deciding on director compensation programs when the program was originally adopted in late 2010, and to provide market data and materials to management and the committee.

Compensation Decision Process

Under the charter of our Leadership Development and Compensation Committee, the Board delegated to the committee the authority and responsibility to discharge the responsibilities of the Board relating to compensation of our executive officers. This includes, among other things, review and approval of the compensation of our executive officers and of the terms of any compensation agreements with our executive officers. Please see the additional detail regarding the functions and composition of the Leadership Development and Compensation Committee above in this Proxy Statement under the caption "Proposal 1 — Election of Directors — Committees of the Board."

In general, our Leadership Development and Compensation Committee is responsible for the design, implementation and oversight of our executive compensation program. In accordance with its charter, the committee determines the annual compensation of our Chief Executive Officer and other executive officers and reports its compensation decisions to the Board. The committee also administers our equity compensation plans, including our 2010 Equity Incentive Plan and 2010 Employee Stock Purchase Plan. Generally, our Chief Executive Officer, with input from our Chief Human Resources Officer and from Compensia, makes recommendations to the Leadership Development and Compensation Committee regarding the compensation for our named executive officers (other than with respect to compensation of our Chief Executive Officer) based on his assessment of company results, each executive's contributions to these results, his or her progress toward achieving his or her individual goals, and his or her demonstration of Amyris core values. The Leadership Development and Compensation Committee's decisions regarding our Chief Executive Officer's compensation are based on its assessment of company results, his contributions to these results, his progress towards achieving his individual goals, competitive market data, and input from Compensia.

Use of Competitive Data. To monitor the competitiveness of our executives' compensation, the Leadership Development and Compensation Committee adopted a compensation peer group (or the Peer Group) used in connection with 2013 compensation that reflected the pay of executives in comparable positions at similarly-situated companies. The data gathered from the Peer Group was used as reference in executive pay levels (including cash and equity compensation), Board compensation, pay and incentive plan practices, severance and change-in-control practices, equity utilization, and pay/performance alignment. The Peer Group was composed of a cross-section of publicly-traded, U.S.-based companies of similar size to Amyris (in revenues and market capitalization) from related industries (biotechnology, alternative energy/clean technology, and industrial biotechnology/chemicals/biofuels). Based on these criteria, the following companies were included in the Peer Group adopted by the Leadership Development and Compensation Committee in December 2012 for use in assessing the market position of our executive compensation for 2013:

2013 Peer Group

Alnylam Pharmaceuticals, Inc. *(biotech)*	Balchem, Corp. *(speciality chemicals)*
Ceres Global Ag Corp. *(ag/biotech)*	Chemtura Corporation *(speciality chemicals)*
Clean Energy Fuels Corp. *(clean tech)*	Codexis, Inc. *(biotech/clean tech)*
Gevo, Inc. *(biotech/clean tech)*	Innospec Inc. *(specialty chemicals)*
Isis Pharmaceuticals, Inc. *(biotech)*	KiOR, Inc. *(biotech/clean tech)*
Kraton Performance Polymers, Inc. *(specialty chemicals)*	Landec Corp. *(ag/specialty chemicals)*
Metabolix, Inc. *(biotech/specialty chemicals)*	Ormat Technologies, Inc. *(clean tech)*
PolyOne Corporation *(specialty chemicals)*	Rentech, Inc. *(ag/clean tech)*
Solazyme, Inc. *(biotech/clean tech)*	Verenium Corporation *(biotech/clean tech)*

In November 2013, the Leadership Development and Compensation Committee approved updates to the Peer Group for 2014. Similar to our approach for the 2013 Peer Group, we identified potential peers by screening of publicly-traded U.S.-based companies of similar size to us (in revenues and market capitalization) from related industries (biotechnology, Oils, Gas & Fuels, Home & Personal Products specialty chemicals). The Leadership Development and Compensation Committee determined that, for 2014, the Peer Group should be adjusted to give more consideration to specialty chemical and bio-industrial peers, and to reduce the weight placed on alternative energy, pharma and dissimilar biotechnology companies. In addition, the peer group adopted for 2014 eliminated certain companies that were deemed less relevant to Amyris as a result of market capitalization, revenues or other factors. As a result, for 2014 Ceres Global Ag Corp., Clean Energy Fuels Corp., Ormat Technologies, Inc., Verenium Corporation, Alnylam Pharmaceutials, Inc. and Isis Pharmaceuticals, Inc. were removed from the Peer Group, and American Pacific Corporation, BioAmber, Inc., Intrexon Corporation, Renewable Energy Group, Inc., Senomyx, Inc. were added to the Peer Group.

In addition to reviewing analysis of the compensation practices of the Peer Group, the Leadership Development and Compensation Committee looks to the collective experience and judgment of its members and advisors in determining total compensation and the various compensation components provided to executive officers. While the Leadership Development and Compensation Committee does not believe that the Peer Group data is appropriate as a stand-alone tool for setting executive compensation due to the unique nature of our business, it believes that this information is a valuable reference source during its decision-making process.

In making compensation decisions for executive officers for 2013, we also referred to broader compensation survey data from the Radford Global Life Sciences Survey. We have used similar surveys for reference in establishing our 2014 compensation programs.

Target Compensation Levels. For 2013, consistent with 2012, we generally targeted the 40^{th} percentile of our competitive market for total cash (base salary and target cash bonus) and for severance, as determined based on the Peer Group, supplemented by data from industry surveys. We chose the 40^{th} percentile for total cash in part because we are still in the early stages of product development and our associated need to conserve our cash while we ramp up our operations. Equity has been a critical and prominent component in our overall compensation package and we believe that it will remain an important tool for attracting, retaining and motivating our key talent by providing an opportunity for wealth creation as a result of Amyris' success, particularly while we are growing our business and targeting the 40^{th} percentile for total cash compensation. As a result, we have generally targeted equity compensation levels greater than or equal to the 75^{th} percentile of the competitive market for equity compensation based on the Peer Group, supplemented by data from surveys, and taking into consideration Leadership Development and Compensation Committee approved targeted annual burn rate.

In April 2013, the Leadership Development and Compensation Committee reviewed an analysis by Compensia of our executive compensation levels. Based on data compiled from the Peer Group, supplemented by survey data, this analysis indicated that the target total cash compensation for our executives (current base salary plus target incentive opportunity) were at or above the 40^{th} percentile of the competitive market. Several of these compensation levels were set based on individual negotiations in connection with hiring or other circumstances, as well as Leadership Development and Compensation Committee decisions, with input from the Chief Executive Officer, based on scope of responsibility and performance, which led to the variation from the 40^{th} percentile. The committee approved annual equity awards to executives in May 2013 based primarily on the retention value of existing awards held by executives (taking into account option exercise prices and the prevailing market values for our common stock), given that it found most executives were below the 75^{th} percentile of the competitive market in their unvested value.

For 2014, we expect to continue to target the same percentiles as we have in prior years using our updated Peer Group and similar industry survey data, which approach the Leadership Development and Compensation Committee approved in November 2013.

2013 Compensation

Background. In setting the compensation program and decisions for 2013, we were forced to balance achievement of critical operational goals with retention of key personnel, including executives. Accordingly, we focused in particular on providing a strong equity compensation program in order to provide strong retention incentives through challenging periods. We also focused on cash management in setting our total cash compensation target percentiles (and associated salary and bonus target levels) for executives. Another key theme for 2013 was establishing strong incentives to drive company performance, including continued emphasis on company performance goals over individual goals in the 2013 executive cash bonus plan and on equity compensation for longer-term upside potential and sharing in company growth.

Base Salaries. In early 2013, the Leadership Development and Compensation Committee reviewed executive base salaries against our peer group and made several adjustments to ensure competitive base salaries for key and critical executive roles. In April 2013, Dr. Cherry's annual salary was increased from \$350,000 to \$358,750 (retroactively effective to January 2013). In May 2013, Mr. Melo's annual salary was increased from \$500,000 to \$550,000 (retroactively effective to January 2013). In June 2013, Mr. Mills' annual salary was increased from \$450,000 to \$500,000 (retroactively effective to January 2013). The annual base salaries for Messrs. Diniz and Loeb remained the same as they were in 2012, at \$400,000 and \$300,000 respectively. The \$375,000 annual base salary for Ms. McFerson, who joined Amyris in March 2013, was set by her employment offer letter.

In December 2013, Mr. Diniz was appointed as our interim Chief Financial Officer and the Leadership Development and Compensation Committee reviewed his compensation. In connection with such review, certain adjustments were made to Mr. Diniz' cash compensation. Among other things, Mr. Diniz' employment offer letter set his annual base salary at \$400,000, but he has historically received an annual salary through our Brazilian subsidiary's payroll in Brazilian reais. As a result, Mr. Diniz' past salary amounts have not equated to \$400,000 per year. Therefore, in December 2013, we agreed to provide Mr. Diniz a one-time true-up payment of \$110,049 for the exchange rate discrepancies from March 2011 through December 2013. Starting in January 2014, we commenced providing Mr. Diniz a monthly true-up to ensure his local salary paid in Brazilian reais remains commensurate with the \$33,333 per month we committed to in his employment offer letter.

Cash Bonuses. The Leadership Development and Compensation Committee adopted a 2013 bonus plan for executives in June 2013, with additional bonus target metrics reviewed and approved in September 2013. Under the plan, as in 2012, executives became eligible for bonuses based on a combination of company performance and individual performance. A percentage of each executive's target bonus funding for the year was allocated to each of these performance categories. For executives other than the Chief Executive Officer, 80% of the available bonus funding was based on company performance. For the Chief Executive Officer, the bonus award was based solely upon company performance. The committee chose to emphasize company performance goals for the bonus plan given the critical importance of our short term strategic goals, but to retain reasonable incentives and rewards for exceptional individual performance, recognizing the value of such incentives and rewards to our operational performance and to individual retention. In addition, for 2013 the Leadership Development and Compensation Committee set the following target bonus levels for the named executive officers:

Name	Target Bonus ($)
John Melo	300,000[(1)]
Paulo Diniz	200,000
Joel Cherry	100,000
Zanna McFerson	100,000[(2)]
Gary Loeb	90,000
Steven Mills	150,000

(1) Mr. Melo's target bonus was changed from $200,000 to $300,000 in May 2013, retroactive back to January 1, 2013.

(2) Ms. McFerson's target bonus was prorated for less than one year of service with Amyris in 2013. Her prorated target amount was $83,333.

Except for Mr. Loeb, the target bonus for each of these individuals was unchanged from 2012 or, in the case of Ms. McFerson, from the target bonus set in her offer letter. The Leadership Development and Compensation Committee generally did not change bonus targets for 2013 based on the same considerations described above with respect to base salaries.

Based on the foregoing bonus plan structure, the Leadership Development and Compensation Committee was responsible for determining the percentage achievement levels for Amyris and individual performance categories following the end of 2013. The following table shows the percent of target bonus eligibility allocated to each of these two categories. Individual bonuses would be awarded based on the Leadership Development and Compensation Committee's assessment of company results, each executive's contributions to these results, his or her progress toward achieving his or her individual goals, and his or her demonstrating the Amyris core values:

Metric & Funding	Minimum	Target	High
Company Performance			
Company Performance	80%	100%	120%
Eligibility as a % of target bonus	50%	100%	120%
Individual Performance			
Individual Performance	80%	100%	120%
Eligibility as a % of target bonus	80%	100%	120%

If the minimum threshold performance level for the company performance category was not achieved, no bonus funding would be triggered for either category. For individual performance, achievement below the threshold level would result in bonus funding and eligibility to be determined in the discretion of the Leadership Development and Compensation Committee. Also, actual payment of any bonuses remained subject to the final discretion of the committee.

Company Performance Goals. The company performance category was weighted 40% for production, 30% for products, 20% for funding and cash and 10% for environment & safety. These targets were discussed with the Board and Leadership Development and Compensation Committee through spring and summer 2013 and adopted in final form in fall 2013 based on continued development of our business and operating plans for 2013 and beyond. The specific goals comprising the targets were both qualitative and quantitative, and percentages of achievement were to be determined in the discretion of the Leadership Development and Compensation Committee following the end of 2013. The production targets included objectives related to production cost per liter of Biofene, ramp-up of a production plant in Brazil, targets related to progress in yeast strain engineering, achieving production yield objectives relating certain planned products, and management of our product research and development pipeline. The product targets included delivery of specified volumes of early-stage renewable products such as specialty diesel, squalane and certain other specialty chemicals. The cash and funding targets included securing collaboration funding commitments at a certain level for 2014 and operating expense reductions. In setting and weighting these targets, the Leadership Development and Compensation Committee chose to emphasize production and funding and products based on our critical needs for our 2013 operating plan (including ramping-up of our Brazil production plant and delivering higher performing yeast strains while maintaining strong incentives to continue building the foundations of our business through cash conservation and funding, and delivering a safe and productive work environment.

Individual 2013 bonus awards were based upon consideration of each executives performance results relative to his or her individual goals, his or leadership capabilities, his or her demonstration of the Amyris core values and his or her development of functional skills. Individual performance goals include strategic, operational and leadership goals for each of them, with various levels of accomplishment across all of such goals triggering 80%, 100% or 120% achievement. These targets were discussed with the Leadership Development and Compensation Committee through spring and summer 2013 and adopted in final form in fall 2013 based on the evolution of our business, including changes in the composition of our executive team. As discussed above, Mr. Melo had no individual performance goals relevant to his bonus eligibility under the 2013 bonus plan because his bonus eligibility was based entirely on company performance. The individual goals for the other named executive officers included: cash management and funding goals for Mr. Mills; technology development and organizational development goals for Dr. Cherry; manufacturing start-up, production, business development and funding goals for Mr. Diniz (in his then role as chief executive officer of Amyris Brasil, prior to assuming the interim Chief Financial Officer position in December 2013); and sales and collaboration revenue goals for Ms. McFerson. Mr. Loeb was not a continuing officer when individual performance goals were adopted in final form.

Degree of Difficulty in Achieving Performance Goals. The Leadership Development and Compensation Committee considered the likelihood of achievement when recommending and approving, respectively, the company and individual performance goals and bonus plan structures for 2013, but it did not undertake a detailed statistical analysis of the difficulty of achievement of each measure. For 2013, the committee considered the 80% achievement level to be achievable with significant effort, 100% to be extremely challenging, requiring circumstances to align as predicted and exceptional levels of effort on the part of the executive team, and any amounts in excess of 100% to be unlikely, requiring significant unexpected sources of revenue or financing, breakthroughs in technology, manufacturing operations and process development, and business development efforts, as well as favorable external conditions.

2013 Bonus Plan Funding and Award Decisions. In February 2014, the Leadership Development and Compensation Committee determined that the company performance goals were achieved as follows:

Company Performance Goal	Weight	Achievement Level
Production	40%	36%
Products	30%	12%
Cash and Funding	20%	22.2%
Safety and Environment	10%	10%
Total	**100%**	**80.2%**

Based on these achievement levels for the company performance category, the committee determined that the company performance component of the bonus plan should be funded at 50% of target bonus eligibility (as contemplated by the 2013 bonus plan for 80% achievement of the company performance category of the bonus plan).

For individual performance, the committee determined that:

- Mr. Diniz achieved 80% of his goals based on achievement of objectives of President of Amyris Brazil role. Because of the limited time Mr. Diniz served as interim Chief Financial Officer in 2013, which position he assumed in December 2013, the achievement of any interim Chief Financial Officer goals were not evaluated at the February 2014 meeting of the committee.

- Dr. Cherry achieved 89% of his goals based on achievement of technology milestones relating to production and strain engineering, and achieving operational improvements in our research, leadership and development organization.

- Ms. McFerson achieved 78% of her goals based on completion of commercial transactions and achievement of revenue objectives through 2014.

Based on the foregoing, and taking into account the factors above, the committee approved the following bonus awards, determining to provide bonus payouts equivalent to the bonus plan funding described above:

Name	Bonus Payout ($)
John Melo	$150,000.00
Paulo Diniz	$ 85,000.00
Joel Cherry	$120,000.00
Zanna McFerson	$ 35,000.00

The committee considered a variety of factors in determining, in its discretion, to award the bonus payouts described above. In addition to the levels of achievement in the 2013 bonus plan company performance and individual performance categories, the committee considered our cash needs, the accountability of executives for achieving results, the need to retain executives and make bonus plan incentives meaningful for future years, and critical objectives to be achieved in the coming year. We believe that, notwithstanding our continuing need to preserve cash, the payment of these awards was appropriate because the bonus plan appropriately held named executive officers accountable for achievement of company and personal goals, and the payouts were reasonable and appropriate given Amyris' position.

Equity Awards. In 2013, the Leadership Development and Compensation Committee approved annual equity awards for certain executive officers, including the named executive officers. These included the option and restricted stock unit awards detailed in the "Grants of Plan-Based Awards" table below. In March 2013, in connection with her employment offer letter, Ms. McFerson received a new hire equity award, designed to attract her to the role and provide retention value. In May 2013, the committee approved annual equity awards to Mr. Melo, Mr. Diniz and Dr. Cherry that varied significantly by executive relative to the competitive market for such annual awards. For such 2013 grants, disparities in grant size versus the target percentile were based primarily on merit, current equity position and retention considerations. For example, awards varied based on the value of unvested equity awards already held by the named executive officers, the relative contributions of the named executive officers during 2012 and anticipated levels of responsibility for key corporate objectives in 2013. For the 2013 option awards 25% of the shares subject to the award will vest one year from vesting commencement date and 1/48 of the shares subject to the award will vest monthly thereafter. The restricted stock unit awards vest annually over three years from April 2013.

In December 2013, the Leadership Development and Compensation Committee approved the acceleration of "new hire" restricted stock unit awards detailed for Mr. Mills in the "Grants of Plan-Based Awards" table below and also approved a consulting agreement between Amyris and Mr. Mills in connection with his departure as Chief Financial Officer and retirement from Amyris. Also in

December 2013, the Leadership Development and Compensation Committee approved a one-time grant of 50,000 restricted stock units, as detailed for Mr. Diniz in the "Grants of Plan-Based Awards" table below, in connection with his appointment as interim Chief Financial Officer.

Please see the "Grants of Plan-Based Awards" table below for more information about the award types and sizes, grant dates, exercise prices and vesting of option awards described in the preceding paragraph.

Change in Control Arrangements in Named Executive Officer Terms of Employment

Severance and Change of Control Plan.

In November 2013, the Leadership Development and Compensation Committee of the Board adopted the Amyris, Inc. executive severance plan (or the Plan). The Leadership Development and Compensation Committee adopted the Plan to provide a consistent and updated severance framework for Amyris executives that aligns with peer practices. The named executive officers and other senior level employees of Amyris were eligible to participate in the Plan, subject to their execution of a participation agreement and other eligibility requirements. All continuing named executive officer and senior level employees of Amyris that were eligible to participate in the Plan have executed their respective participation agreements. The benefits under the executive severance plan supersede and replace the existing executive severance arrangements in each of the named executive officers' (and eligible senior level employees' offer letters) that were described in our 2013 proxy statement filed with the Securities and Exchange Commission on April 16, 2013. The potential payments payable under the Plan and related defined terms are described in detail below under "Potential Severance Payments upon Termination and upon Termination Following a Change in Control."

We believe that the Plan appropriately balances our need to offer a competitive level of severance protection to our executives and to induce our executives to remain in our employ through the potentially disruptive conditions that may exist around the time of a change in control, while not unduly rewarding executives for a termination of their employment.

In addition, in December 2013, we entered into a consulting agreement with Mr. Mills that provided for certain benefits beyond those contemplated by his offer letter, including the acceleration of certain of Mr. Mills unvested restricted stock units and a one-time retention bonus payment of $90,000.00 to be paid in connection with Mr. Mills' agreement to continue to work on behalf of Amyris in the capacity of a consultant.

Other Executive Benefits and Perquisites. We provide the following benefits to our executive officers on the same basis as other eligible employees:

- health insurance;
- vacation, personal holidays and sick days;
- life insurance and supplemental life insurance;
- short-term and long-term disability; and
- a 401(k) plan.

We believe these benefits are generally consistent with those offered by other companies with which we compete for executive talent.

Some of the executives whom we have hired including Messrs. Melo and Mills, held positions in locations outside of Northern California at the time that they agreed to join us at our headquarters in Emeryville, California. We have agreed in these instances to pay relocation expenses to these executives, including temporary housing, costs associated with commuting from our facilities to their family's home outside of Northern California. The amounts paid in 2013 to named executive officers are included in the "All Other Compensation" column in the "Summary Compensation Table" below and the associated footnotes. Given the cost of living in the San Francisco Bay Area relative to most other metropolitan areas in the U.S., we believe that in order for us not to be limited to hiring executives located near our headquarters in Emeryville, California, that we must be willing to offer to pay an agreed upon amount of relocation costs. Additionally, we have agreed to cover certain expenses incurred in connection with Mr. Diniz' temporary relocation from Brazil and interim Chief Financial Officer assignment at our headquarters in Emeryville, California, including interim corporate housing, a one-time relocation lump sum payment in the amount of $10,000, spouse and family travel, California-based medical and dental insurance, and certain tax planning services.

Other Compensation Practices and Policies. We have the following additional compensation practices and policies that apply to our named executive officers:

Timing of Equity Awards. The timing of equity awards has been determined by the Board or Leadership Development and Compensation Committee based on the Board's or committee's view at the time regarding the adequacy of executive equity interests in Amyris for purposes of retention and motivation.

In February 2013, our Board ratified our existing policy regarding equity award grant dates, fixing grant dates in an effort to ensure the integrity of the equity compensation award granting process. This policy took effect beginning with equity awards granted after the original adoption of the policy in March 2011. Under the policy, equity compensation awards are generally granted on the following schedule:

- For equity awards to ongoing employees, the grant date is set as of the first business day of the week following the week in which the award is approved; and
- For equity awards to new hires, the grant date is set as of the first business day of the week following the later of the week in which the award is approved or the week in which the new hire commences his or her employment.

Tax Considerations. Section 162(m) of the Code disallows a tax deduction for any publicly held corporation for individual compensation exceeding $1.0 million in any taxable year for its president and chief executive officer and each of the other named executive officers (other than its chief financial officer), unless compensation is "performance based." To date, the Board has not previously taken the deductibility limit imposed by Section 162(m) into consideration in setting compensation. However, our 2010 Equity Incentive Plan includes various provisions designed to allow us to qualify stock options and other equity awards and performance based compensation under Section 162(m), including a limitation on the maximum number of shares subject to awards that may be granted to an individual under the plan in any one year. Also, among other requirements, for certain awards granted under the 2010 Equity Incentive Plan to qualify as fully deductible performance-based compensation under Section 162(m), our stockholders were required to re-approve the plan on or before the first annual meeting of stockholders at which directors were to be elected that occurred after the close of the third calendar year following the calendar year of our initial public offering. We sought and received such approval at our 2011 annual meeting of stockholders.

Our Leadership Development and Compensation Committee may adopt a policy at some point in the future providing that, where reasonably practicable, we will seek to qualify the variable compensation paid to our executive officers for an exemption from the deductibility limitations of Section 162(m). Until such policy is implemented, our Leadership Development and Compensation Committee may, in its discretion, authorize compensation payments that do not consider the deductibility limit imposed by Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

Policy Regarding Restatements. We do not have a formal policy regarding adjustment or recovery of awards or payments if the relevant performance measures upon which they are based are restated or otherwise adjusted in a manner that would reduce the size of the award or payment. Under those circumstances, the Board or the Leadership Development and Compensation Committee would evaluate whether adjustments or recoveries of awards were appropriate based upon the facts and circumstances surrounding the restatement. We anticipate that the Board or Leadership Development and Compensation Committee will adopt a policy regarding restatements in the future based on anticipated SEC and exchange regulations requiring listed companies to have a policy that requires repayment of incentive compensation that was paid to current or former executives over the three-year period prior to any restatement due to material noncompliance with financial reporting requirements.

Stock Ownership and Hedging Policies. We have not established stock ownership or similar guidelines with regards to our executive officers. All of our executive officers currently have a direct or indirect, through their stock option holdings, equity interest in our company, and we believe that they regard the potential returns from these interests as a significant element of their potential compensation for services to us. We have generally targeted the market 75th percentile for executive officer equity compensation.

We have a policy entitled "Procedures and Guidelines Governing Securities Trades by Company Personnel" (referred to as our Insider Trading Policy) that, among other things, prohibits trading while in possession of material non-public information. Under the Insider Trading Policy, our employees, officers and directors may not acquire, sell or trade in any interest or position relating to the future price of our securities (such as a put option, a call option or a short sale).

Leadership Development and Compensation Committee Report*

The Leadership Development and Compensation Committee has reviewed and discussed with management the "Compensation Discussion and Analysis" contained in this Proxy Statement. Based on this review and discussion, the Leadership Development and Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Proxy Statement.

Amyris, Inc. Leadership Development and Compensation Committee of the Board
Carole Piwnica (Chair)
Nam-Hai Chua
John Doerr

* The material in this report is not "soliciting material," is not deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Amyris under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing

Summary Compensation Table

The following table sets forth information regarding 2013 compensation earned by our named executive officers. The table shows compensation for 2013 and, where the individual was a named executive officer for the relevant prior year, 2012 and 2011.

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Stock Awards ($)(2)	Option Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)(1)	All Other Compensation ($)	Total ($)
John Melo	**2013**	550,000	—	685,930	728,065	150,000	—	2,113,995
President and Chief	**2012**	500,000	—	965,000	637,903	100,000	10,279(3)	2,213,182
Executive Officer	**2011**	500,000	—	696,900	1,633,044	—	28,021(4)	2,857,965
Paulo Diniz(5)	**2013**	377,861	—	261,800	121,008	85,000	5,081(6)	850,750
Interim Chief Financial	**2012**	355,628(7)	—	193,000	50,008	108,000	13,728(7)	720,364
Officer	**2011**	304,735	300,000	1,212,000	4,860,250	—	10,210(8)	6,687,195
Joel Cherry*	**2013**	358,750	—	318,570	340,839	120,000	1,020(9)	1,139,179
President, Research and Development	**2012**	366,667	—	598,300	62,510	60,000	—	1,087,477
Susanna McFerson*	**2013**	311,298	—	375,700	411,620	35,000	69,931(10)	1,203,549
Chief Business Officer								
Steven Mills*	**2013**	487,572	90,000	1,028,420	508,234		8,500(11)	2,122,725
Former Chief Financial Officer	**2012**	298,558	—	690,000	750,876	90,000	199,779(12)	2,029,213
Gary Loeb*	**2013**	174,758	—	86,100	90,756		4,657(13)	356,271
Former Senior Vice President and General Counsel	**2012**	270,000	—	425,300	286,244	48,600	—	1,030,144

* Ms. McFerson joined Amyris on March 4, 2013 and was not a named executive officer in fiscal year 2012 or 2011. The amount shown in the salary column represents a partial year's salary based on her March 2013 start date. Dr. Cherry and Messrs. Mills and Loeb were not named executive officers for fiscal year 2011. Mr. Mills commenced his employment with Amyris in May 2012 and he terminated his employment in December 2013. The amount shown in the salary column for Mr. Mills in 2012 and 2013 represents partial year's salary based on his May 2012 hire date and December 2013 termination date, respectively. Mr. Loeb commenced his employment with Amyris in a prior year but did not serve as executive officers until October 2012. Subsequently, Mr. Loeb terminated his employment in May 2013 and the amount shown in the salary column for that year represents a partial year's salary up to his termination date.

(1) The amounts reported in the "Bonus" column represent discretionary bonuses determined by the Board. In 2013, Mr. Mills was paid a one-time retainer bonus of $90,000 as part of his consideration to remain a consultant to Amyris after he stepped down as our Chief Financial Officer. In 2011, Mr. Diniz was paid a sign-on bonus of $100,000 and a $200,000 guaranteed bonus as set forth in his offer letter when he joined Amyris. As required under applicable rules of the Securities and Exchange Commission, payments under our 2013 annual bonus plan are included in the column entitled "Non-Equity Incentive Plan Compensation", as they were based upon the satisfaction of pre-established performance targets, the outcome of which was substantially uncertain. No annual bonuses were paid to executive officers under our 2011 bonus plan.

(2) The amounts in the "Stock Awards" and "Option Awards" column reflect the aggregate grant date fair value computed in accordance with FASB ASC Topic 718. The assumptions made in the valuation of

the awards are discussed in Note 11, "Stock-based Compensation Plans" of "Notes to Consolidated Financial Statements" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013. To the extent that outstanding equity awards were materially modified during the year, including the re-pricing of certain options discussed above under "Executive Compensation — 2013 Compensation — Equity Awards," the amounts in the "Stock Awards" and "Option Awards" columns reflect the incremental fair value, computed as of re-pricing or other modification date calculated in accordance with FASB ASC Topic 718, with respect to that re-priced or modified award. See the "Grants of Plan-Based Awards" table for additional information regarding stock and option awards granted in fiscal year 2013. These amounts do not correspond to the actual value that may be recognized by the named executive officers.

(3) Includes $10,279 of personal travel expenses, including commuting expenses.

(4) Includes $1,888 in technology purchases for Mr. Melo, $16,128 of fees and expenses associated with participation in and attendance of professional association events and related travel expenses, and $10,005 of personal travel expenses, including commuting expenses.

(5) Mr. Diniz' approved salary is $400,000; he is paid directly by Amyris Brasil and amounts reported in this table reflect the amount paid in Brazilian reais converted to U.S. dollars at the exchange rate on December 31, 2013

(6) Includes $5,081 of personal travel expenses, including commuting expenses.

(7) Includes $13,728 of personal travel expenses, including commuting expenses.

(8) Includes $10,210 for reimbursement of personal travel expenses, including commuting expenses.

(9) Includes $1,020 reimbursement for commuting expenses.

(10) Includes $52,270 reimbursement for temporary housing and $17,662 for relocation stipend.

(11) Includes $8,500 for relocation stipend.

(12) Includes $28,283 for reimbursement for temporary housing and $171,496 for a $125,000 relocation stipend and reimbursement of relocation-related travel and other expenses.

(13) Includes $4,657 imputed income for family health coverage cost.

Grants of Plan-Based Awards in Fiscal Year 2013

The following table sets forth information regarding grants of compensation in the form of plan-based awards made during fiscal year 2013 to our named executive officers.

Name	Grant Date[(1)]	Approval Date of Grant[(1)]	Estimated Future Payouts Under Non-Equity Incentive Plan Awards Threshold ($)[(2)]	Target ($)[(2)]	Maximum ($)[(2)]	All Other Stock Awards: Number of Shares of Stock or Units (#)[(3)]	All Other Option Awards: Number of Securities Underlying Options (#)[(4)]	Exercise or Base Price of Option Awards ($/Sh)[(5)]	Grant Date Fair Value of Stock and Option Awards ($)[(6)]
Melo, John	06/03/2013	04/01/2013	$240,000	$300,000	$450,000	239,000			685,930
Melo, John	06/03/2013	04/01/2013					361,000	2.87	728,065
Diniz, Paulo	06/03/2013	04/01/2013	$160,000	$200,000	$288,000	40,000			114,800
Diniz, Paulo	06/03/2013	04/01/2013					60,000	2.87	121,008
Diniz, Paulo	12/16/2013	10/01/2013				50,000			147,000
Cherry, Joel	06/03/2013	04/01/2013	$ 80,000	$100,000	$144,000	111,000			318,570
Cherry, Joel	06/03/2013	04/01/2013					169,000	2.87	340,839
McFerson, Susanna	03/11/2013	03/04/2013	$ 66,667	$100,000	$120,000	130,000			375,700
McFerson, Susanna	03/11/2013	03/04/2013					200,000	2.89	411,620
Mills, Steven	06/03/2013	04/01/2013	$160,000	$200,000	$288,000	166,000			1,028,420
Mills, Steven	06/03/2013	04/01/2013					252,000	2.87	508,234
Loeb, Gary	06/03/2013	04/01/2013	$ 72,000	$ 90,000	$129,600	30,000			86,100
Loeb, Gary	06/03/2013	04/01/2013					45,000	2.87	90,756

(1) Our Board has adopted a policy regarding the grant date of such awards under which the grant date of all equity awards generally would be the first business day of the week following the week in which the award was approved by the Leadership Development and Compensation Committee. Notwithstanding such grant date, for purposes of determining the grant date fair value in accordance with FASB ASC Topic 718 (as described in footnote 6 below), the deemed grant date for restricted stock unit awards listed herein was generally the approval date set forth in the column entitled “Approval Date of Grant.” The Grant Date Fair value entry in June 2013 for Mr. Mills, include the impact of acceleration of vesting of an equity award.

(2) In March 2013, the Leadership Development and Compensation Committee approved a non-equity incentive plan under which the eligibility amounts reported under “Estimated Future Payouts Under Non-Equity Incentive Plan Awards” were based. The terms of the plan and actual amounts paid out under the 2013 bonus plan are discussed above in this Proxy Statement under “Executive Compensation—2013 Compensation—Cash Bonuses” and the amounts paid out are included in the “Non-Equity Incentive Plan Compensation” column of the “Summary Compensation Table” above. The estimated future payouts as of December 31, 2013 shown in this table reflect the annual incentive awards that would have been at the threshold, target and maximum levels for each individual assuming that cash bonuses had been paid at each of such levels.

(3) Amounts in this column represent restricted stock units granted under our 2010 Equity Incentive Plan:

- Ms. McFerson restricted stock unit award was granted pursuant to her employment offer letter and had a two-year vesting schedule from a vesting commencement date of March 4, 2013, with 80,000 of the units subject to the award vesting after one year, and the remainder vesting after two years. Ms. McFerson’s restricted stock unit award is subject to certain rights to acceleration of vesting upon termination of employment as further described below under “Potential Payments upon Termination and upon Termination Following a Change in Control.”

- Mr. Diniz received a restricted stock unit award in June 2013 as part of the annual grant process and it had a three-year vesting schedule from a vesting commencement date of April 1, 2013, with one third of the units vesting annually. Mr. Diniz also received a restricted stock unit award in December 2013 in connection with his appointment as interim Chief Financial Officer. Such award had a three-year vesting schedule from a vesting commencement date of October 1, 2013, with one third of the units vesting annually.

- All other restricted stock unit awards granted in June 2013 had a three-year vesting schedule from a vesting commencement date of April 1, 2013, with one third of the units vesting annually.

(4) Amounts in this column represent stock option awards granted under our 2010 Equity Incentive Plan:

- Ms. McFerson's option award was granted pursuant to her employment offer letter and had a four-year vesting schedule from a vesting commencement date of March 4, 2013, with 25% of the shares subject to the option vesting after one year and the remainder vesting in equal monthly installments over three years

- The other option awards granted in June 2013 were part of the annual grant process and it had a four-year vesting schedule from a vesting commencement date of April 1, 2013, with 1/48th of the shares subject to the option vesting monthly

- The option grants are subject to certain rights to acceleration of vesting upon a change in control of our company and termination of employment following a change in control, as further described below under "Potential Payments upon Termination and upon Termination Following a Change in Control."

(5) The option exercise price per share is the closing price of our common stock on NASDAQ on the date of grant, which represents the fair value of our common stock on the same date. Restricted stock unit awards did not have any exercise price.

(6) Reflects the grant date fair value of each award computed in accordance with FASB ASC Topic 718. The assumptions made in the valuation of the awards are discussed in Note 11, "Stock Based Compensation Plans" of "Notes to Consolidated Financial Statements" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013. The grant date fair value for Mr. Mills' June 3, 2013 award included the incremental fair value resulting from the acceleration of vesting of certain restricted stock units previously awarded to him.

Narrative Disclosure to Summary Compensation and Grants of Plan-Based Awards Tables

The material terms of the named executive officers' annual compensation, including base salaries, discretionary cash bonuses, our equity award granting practices and severance benefits and explanations of compensation decisions for cash and equity compensation during 2013 are described in the "Compensation Discussion and Analysis" section above. As noted below under "Agreements with Executives, except for certain terms contained in offer letters and equity award agreements and our consulting agreement with Mr. Mills, none of our named executive officers has entered into a written employment agreement with us.

2014 Bonus Plan

In March 2014, the Leadership Development and Compensation Committee approved a 2014 cash bonus plan (or the 2014 Bonus Plan) that included the cash bonus plan for our executive officers. The 2014 Bonus Plan provides the following structure for Amyris' named executive officers set forth in this Proxy Statement:

- **General Structure**. The 2014 Bonus Plan provides for funding and payout of cash bonus awards based on quarterly and annual performance during 2014. The total potential funding of the 2014 Bonus Plan for each of these bonus periods is based on our performance under certain metrics set by the Leadership Development and Compensation Committee for each quarter and for the entire year. Payouts under the 2014 Bonus Plan would occur following a review of our results and performance each quarter.

- **Funding Target Levels and Performance Metrics**. The total funding possible under the 2014 Bonus Plan is based on a cash value (or the "Target Bonus Fund") determined by the named executive officers' target bonus levels. Target bonuses for the named executive officers vary by officer, but are generally set at approximately 30% of annual base salary, other than for the Chief Executive Officer and interim Chief Financial Officer, whose target bonuses are set at approximately 80% and 50% of their annual base salary, respectively. The aggregate amount of these target bonuses are the basis for the total funding of the 2014 Bonus Plan. The quarterly and annual funding of the 2014 Bonus Plan is based on achievement of the following company performance metrics for each quarter during 2014 (as determined by the Leadership Development and Compensation Committee and, in the case of quarterly funding, as applicable for the quarter based on Amyris' operating plan): cash gross margin from product sales and collaboration inflows for the quarter, cash production costs at Amyris' Brazil manufacturing plant, cash operating expenditures and strain performance. Generally, each performance metric applicable to a given 2014 Bonus Plan period is weighted equally.

- **Funding Calculation**. For each of the four quarterly periods of the 2014 Bonus Plan, the 2014 Bonus Plan allocates 12.5% of the total Target Bonus Fund. For the annual period of the 2014 Bonus Plan, the 2014 Bonus Plan allocates 50% of the total Target Bonus Fund. If we do not achieve at least a "threshold" level of the performance metrics described above for a given 2014 Bonus Plan period, no funding would occur under the 2014 Bonus Plan. If we achieve at least the threshold level, 80% funding would occur. For achievement of performance metrics between the threshold level and "target" level, a pro rata increase in funding would occur up to 100% of the Target Bonus Fund allocated to such period. For achievement of performance metrics above the target level, for the annual funding, a pro rata increase in funding would occur up to 150% of the Target Bonus Fund. The threshold and 150% (or "superior") performance levels and associated funding are intended to capture the relative difficulty of achievement.

- **Payouts**. Any payouts for the quarterly bonus periods would be the same as the funded level (provided the recipient meets eligibility requirements through the payout date), and would be subject to a cap of 100% of the allocated quarterly Target Bonus Fund. Any funding in excess of 100% of the allocated quarterly Target Bonus Fund would not be paid out, and instead would be allocable to subsequent quarters (up to 100% of the allocated Target Bonus Fund for the subsequent quarter) and/or the annual bonus fund, in that order. Excess quarterly funding not paid, but added to the annual bonus fund, is in addition to the annual bonus fund maximum of 150% of the annual Target Bonus Fund. Payouts for the annual bonus period would be made from the aggregate funded amount in the discretion of the Leadership Development and Compensation Committee based on Amyris' and individual performance, and could range from 0% to 200% of an individual's target bonus.

Outstanding Equity Awards as of December 31, 2013

The following table sets forth information regarding outstanding equity awards held as of December 31, 2013 by our named executive officers.

	Option Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($/Sh)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)*
John Melo	279,979(2)(9)	—	3.93	08/25/2018		
	298,004(3)(12)	—	20.41	04/20/2020		
	61,250(5)(13)	22,750	26.84	04/15/2021		
	41,666(5)(15)	58,334	3.86	04/09/2022		
	—(5)(18)	361,000	2.87	06/03/2023		
					479,999(6)(7)(13)(15)(18)	2,539,195
Paulo Diniz	137,500(2)(14)	112,500	26.84	04/15/2021		
	8,333(5)(15)	11,667	3.86	04/09/2022		
	—(5)(18)	60,000	2.87	06/03/2023		
					136,666(6)(14)(15)(18)(19)	722,963
Joel Cherry	163,500(1)(2)(10)	—	4.31	09/14/2019		
	20,000(1)(3)(11)	—	9.32	01/07/2020		
	18,229(5)(13)	6,771	26.84	04/15/2021		
	10,416(5)(15)	14,584	3.86	04/09/2022		
	—(5)(18)	169,000	2.87	06/03/2023		
					250,999(6)(7)(13)(15)(18)	1,327,785
Susanna McFerson	—(4)(17)	200,000	2.89	03/11/2023		
					130,000(8)(17)	687,700
Steven Mills	166,250(4)(16)	—	2.76	05/29/2022	—(20)	—

* Calculated by multiplying the closing price of our common stock on NASDAQ on December 31, 2013, $5.29, by the number of units that had not vested as of December 31, 2013.

(1) Options granted under the 2005 Stock Option/Stock Issuance Plan to our named executive officers are immediately exercisable, regardless of vesting schedule.

(2) Options vest as to 20% of the original number of shares on the first anniversary of the vesting commencement date, which is a date fixed by the Board or Leadership Development and Compensation Committee when granting equity awards, and as to an additional $1/60^{th}$ of the original number of shares each month thereafter until the fifth anniversary of the vesting commencement date, subject to continued service through each vesting date.

(3) Options vest at a rate of $1/60^{th}$ of the original number of shares monthly from the vesting commencement date until the fifth anniversary of the vesting commencement date, subject to continued service through each vesting date.

(4) Options vest as to 25% of the original number of shares on the first anniversary of the vesting commencement date, and as to an additional $1/48^{th}$ of the original number of shares each month thereafter until the fourth anniversary of the vesting commencement date, subject to continued service through each vesting date.

(5) Options vest at a rate of $1/48^{th}$ of the original number of shares monthly from the vesting commencement date until the fourth anniversary of the vesting commencement date, subject to continued service through each vesting date.

(6) Restricted stock units vest at a rate of 1/3rd of the original number of units annually from the vesting commencement date until the third anniversary of the vesting commencement date, subject to continued service through each vesting date.

(7) Restricted stock units vest as to 100% of the units subject to the award on the second anniversary of the vesting commencement date, subject to continued service through each vesting date.

(8) Restricted stock units vest as to 80,000 of the units subject to the award after one year from the vesting commencement date, the remainder after two years from the vesting commencement date.

(9) The vesting commencement date of this grant was June 3, 2008.

(10) The vesting commencement date of this grant was November 3, 2008.

(11) The vesting commencement date of this grant was October 27, 2009.

(12) The vesting commencement date of this grant is April 20, 2010.

(13) The vesting commencement date of this grant was January 1, 2011.

(14) The vesting commencement date of this grant was March 1, 2011.

(15) The vesting commencement date of this grant was April 1, 2012.

(16) The vesting commencement date of this grant was May 2, 2012.

(17) The vesting commencement date of this grant was March 4, 2013.

(18) The vesting commencement date of this grant was April 1, 2013.

(19) The vesting commencement date of this grant was October 1, 2013.

(20) 250,000 unvested restricted stock units from the 416,000 previously granted to Mr. Mills were accelerated in December 2013.

Option Exercises and Stock Vested During Fiscal Year 2013

The following table shows information regarding exercise of options and vesting of restricted stock and restricted stock units held by our named executive officers during fiscal year 2013:

	Option Awards		Stock Awards	
Name	**Number of Shares Acquired on Exercise (#)**	**Value Realized on Exercise ($)(1)**	**Number of Shares Acquired on Vesting (#)**	**Value Realized on Vesting ($)(1)**
John Melo			24,334	75,535
Paul Diniz			30,000	89,133
Joel Cherry			21,667	66,768
Steve Mills			250,000	700,000
Gary Loeb			1,667	4,834

(1) Values realized on exercise or vesting are calculated based on the closing price as reported on NASDAQ for our common stock on the date of exercise. Stock awards include restricted stock units, which are settled solely in shares of our common stock. These amounts are presented solely for purposes of this table, and do not correspond to the actual value that was recognized by such individuals.

Pension Benefits

None of our named executive officers participates in, or has an account balance in, a qualified or non-qualified defined benefit plan sponsored by us.

Non-Qualified Deferred Compensation

None of our named executive officers participates in, or has account balances in, a traditional non-qualified deferred compensation plan or other deferred compensation plans maintained by us.

Potential Severance Payments upon Termination and upon Termination Following a Change in Control

Change in Control Arrangements in Severance and Change of Control Plan.

In November 2013, the Leadership Development and Compensation Committee of the Board adopted the Amyris, Inc. Executive Severance Plan. The Leadership Development and Compensation Committee adopted the executive severance plan to provide a consistent and updated severance framework for Amyris executives that aligns with peer practices. The named executive officers and other senior level employees were eligible to participate in the executive severance plan, subject to their execution of a participation agreement and other eligibility requirements. All continuing named executive officer and senior level employees that were eligible to participate in the executive severance plan have executed their respective participation agreements. The benefits under the executive severance plan supersede and replace the existing executive severance arrangements in each of the named executive officers' (and eligible senior level employees') offer letters that were described in our 2013 proxy statement filed with the Securities and Exchange Commission on April 16, 2013. In connection with the execution of a participation agreement, the participants are eligible for the following benefits under the executive severance plan.

Upon involuntary termination by Amyris of a participant's employment other than for "cause" or termination by the participant of such participant's employment for "good reason" (each as defined below) (referred to as an Involuntary Termination), the participant becomes eligible for the following severance benefits from Amyris:

- 12 months of base salary continuation (18 months for the Chief Executive Officer)
- 12 months of health benefits continuation (18 months for the Chief Executive Officer)

Upon an Involuntary Termination of a participant at any time within the period beginning three months before and ending 12 months after a change in control of Amyris, the participant becomes eligible for the following severance benefits from Amyris:

- 18 months of base salary continuation (24 months for the Chief Executive Officer)
- 18 months of health benefits continuation (including for the Chief Executive Officer)
- Automatic acceleration of vesting of all outstanding equity awards then held by the participant

In each case, the benefits are contingent upon the participant complying with various requirements, including non-solicitation and confidentiality obligations to Amyris, and on execution by the participant of a standard company release of claims within 60 days of the participant's separation from service. The benefits are subject to forfeiture if, among other things, the participant commences employment with another employer or breaches any of his or her obligations under the executive severance plan and related agreements. The benefits are subject to adjustment and deferral based on applicable tax rules relating change-in-control payments and deferred compensation.

Under the executive severance plan, "cause" generally encompasses the participant's: (i) gross negligence or intentional misconduct; (ii) failure or inability to satisfactorily perform any assigned duties; (iii) commission of any act of fraud or misappropriation of property or material dishonesty; (iv) conviction of a felony or a crime involving moral turpitude; (v) unauthorized use or disclosure of the confidential information or trade secrets of Amyris or any of its affiliates that use causes material harm to Amyris; (vi) material breach of contractual obligations or policies; (vii) failure to cooperate in good faith with investigations; or (viii) failure to comply with confidentiality or intellectual property agreements. Prior to any determination that "cause" under this executive severance plan, Amyris is generally required to provide notice to the participant and a 30-day cure period.

"Good reason" generally means: (i) a material reduction of the participant's role at Amyris; (ii) certain reductions of base salary; (iii) a workplace relocation of more than 50 miles; or (iv) a failure of Amyris to obtain the assumption of the executive severance plan by a successor. In order for a participant to assert good reason for his or her resignation, he or she must provide Amyris with 90 days written notice and allow Amyris 30 days to cure the condition. Additionally, if Amyris fails to cure the condition within the cure period, the participant must terminate employment with Amyris within 30 days of the end of the cure period.

To the extent any severance benefits to a named executive officer constitute deferred compensation subject to Section 409A of the Code and that officer is deemed a "specified employee" under Section 409A, then we will defer payment of these benefits to the extent necessary to avoid adverse tax treatment.

We believe that the executive severance plan appropriately balances our need to offer a competitive level of severance protection to our executives and to induce our executives to remain in our employ through the potentially disruptive conditions that may exist around the time of a change in control, while not unduly rewarding executives for a termination of their employment.

In addition, in December 2013, we entered into a consulting agreement with Mr. Mills that provided for certain benefits beyond those contemplated by his offer letter, including the acceleration of certain of Mr. Mills' unvested restricted stock units and a one-time retention bonus payment of $90,000 to be paid in connection with Mr. Mills' agreement to continue to work on our behalf in the capacity of a consultant.

The following table summarizes the potential payments and benefits payable to each of our named executive officers other than Mr. Loeb and Mr. Mills (who did not receive any severance benefits in connection with their departures) upon (i) termination of employment other than for cause and (ii) termination without cause or constructive termination following a change in our control, modeling, in each situation, that termination and change of control, where applicable, occurred on December 31, 2013.

	Qualifying Termination Other Than for Cause Not in Connection with a Change of Control			Qualifying Change of Control and Termination Without Cause or Constructive Termination Within Qualifying Period Following a Change of Control		
Name	Base Salary($)(1)	COBRA Benefits ($)(1)	Value of Accelerated Options or Shares ($)(2)	BaseSalary ($)(1)	COBRA Benefits ($)(1)	Value of Accelerated Options or Shares ($)(2)
John Melo	825,000	40,430	—	1,110,000	53,907	3,496,232
Paulo Diniz	400,000	13,660	—	600,000	20,490	884,847
Joel Cherry	350,000	282	—	525,000	424	1,757,620
Zanna McFerson	375,000	5,945		562,500	8,917	1,167,700

(1) The amounts in this column assume that the respective named executive officer has not started employment with another company before the expiration of 12 months (and 18 months for the Chief Executive Officer) from termination of his or her employment with us.

(2) With respect to outstanding options as of December 31, 2013, this amount is equal to (a) the number of shares underlying unexercised options that would vest as a direct result of employment termination without cause or constructive termination following a change of control, assuming a December 31, 2013, change of control and employment termination, multiplied by (b) the excess of $5.29, the closing market price of our common stock on NASDAQ as of December 31, 2013, over the exercise price of the options. With respect to restricted stock unit awards held by the named executive officer, this amount is equal to (a) the number of unvested units that would vest as a direct result of employment termination without cause or constructive termination following a change of control, assuming a December 31, 2013, change of control and employment termination, multiplied by (b) $5.29. Options with exercise prices higher than $5.29 are excluded from the calculation.

(3) The amounts in this column assume that the respective named executive officer has not started employment with another company before the expiration of 18 months (and 24 months for the Chief Executive Officer) from termination of his or her employment with us.

(4) With respect to outstanding options as of December 31, 2013, this amount is equal to (a) the number of shares underlying unexercised options that would vest as a direct result of employment termination without cause or constructive termination following a change of control, assuming a December 31, 2013, change of control and employment termination, multiplied by (b) the excess of $5.29, the closing market price of our common stock on NASDAQ as of December 31, 2013, over the exercise price of the options. With respect to restricted stock unit awards held by the named executive officer, this amount is equal to (a) the number of unvested units that would vest as a direct result of employment termination without cause or constructive termination following a change of control, assuming a December 31, 2013, change of control and employment termination, multiplied by (b) $5.29. Options with exercise prices higher than $5.29 are excluded from the calculation.

Agreements with Executives

Other than our consulting agreement with Mr. Mills entered into in connection with his departure in December 2013, we do not have formal employment agreements with any of our named executive officers. The initial compensation of each named executive officer was set forth in an offer letter that we executed with him or her at the time his or her employment with us commenced and that, for Messrs. Melo and Cherry, was later amended. Each offer letter provides that the named executive officer's employment is at will.

As a condition to their employment, our named executive officers entered into non-competition, non-solicitation and proprietary information and inventions assignment agreements. Under these agreements, each named executive officer has agreed (i) not to solicit our employees during his or her employment and for a period of 12 months after the termination of his or her employment, (ii) not to compete with us or assist any other person to compete with us during the officer's employment with us and (iii) to protect our confidential and proprietary information and to assign to us intellectual property developed during the course of his or her employment.

See above "Executive Compensation — Potential Severance Payments upon Termination and upon Termination Following a Change in Control" for a description of potential payments to our named executive officers on a change of control.

Limitation of Liability and Indemnification

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors for:

- any breach of the director's duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- voting or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, our currently-effective bylaws provide that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain an insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

Certain of our non-employee directors may, through their relationships with their employers, be insured and/or indemnified against certain liabilities incurred in their capacity as members of the Board.

We have entered into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

As previously disclosed in our filings with the Securities and Exchange Commission, Amyris and our Chief Executive Officer, John Melo were named a party to a securities class action complaint in May 2013 and a complaint filed derivatively on behalf of Amyris in August 2013. In the event that liability is found or a financial settlement is reached with respect to such legal proceedings, Mr. Melo or our other named executive officers could seek indemnification from Amyris. We are not presently aware of any other pending litigation or proceeding involving any person who is or was one of our directors, officers, employees or other agents or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Rule 10b5-1 Sales Plans

Certain of our directors and executive officers have adopted written plans, known as Rule 10b5-1 plans under which they have contracted with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or executive officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

Director Compensation

Mr. Melo did not receive any compensation in connection with his service as a director due to his status as an employee. The compensation that we pay to Mr. Melo is discussed in the "Executive Compensation" section of this prospectus.

Director Compensation for Fiscal Year 2013

During the fiscal year ended December 31, 2013, our directors who served during 2013 (other than Mr. Melo) received the following compensation:

Name	Fees Earned or Paid in Cash ($)[1]	Stock Awards ($)[2][3][4]	Option Awards ($)[2][3][4]	All Other Compensation ($)[5]	Total ($)
Arthur Levinson	60,000	8,280	11,593	—	79,873
Philippe Boisseau	60,000	—	—	—	60,000
Nam-Hai Chua	62,976	8,280	11,593	—	82,849
John Doerr	77,150	8,280	11,593	—	97,023
Geoffrey Duyk	71,250	8,280	11,593	—	91,123
Carole Piwnica	81,322	8,280	11,593	—	101,195
Fernando de Castro Reinach	63,544	8,280	11,593	—	83,417
HH Sheikh Abdullah bin Khalifa Al Thani	60,000	8,280	11,593	—	79,873
Raymond N Williams	35,444	8,280	53,079	—	96,803
Ralph Alexander	58,927	—	—	—	58,927
Patrick Pichette	47,056	—	—	—	47,056
Neil Renninger	10,000	—	—	—	10,000

(1) Reflects board, committee chair and committee retainer fees earned during fiscal year 2013, as well as reimbursement of expenses. Also reflects amounts earned during Q3 and Q4 of fiscal year 2012, but not paid until fiscal year 2013. The amounts earned in Q3 and Q4 of fiscal year 2012 were also reflected in our 2013 proxy statement.

(2) The amounts in the "Stock Awards" and "Option Awards" column reflect the aggregate grant date fair value computed in accordance with FASB ASC Topic 718. The assumptions made in the valuation of the awards are discussed in Note 11, "Stock Based Compensation Plans" of "Notes to Consolidated Financial Statements" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013. These amounts do not correspond to the actual value that may be recognized by the directors.

(3) At December 31, 2013, the following non-employee directors each held equity awards covering the following aggregate numbers of shares and units:

Name	Outstanding Options (Shares)	Outstanding Stock Awards (Units)
Arthur Levinson	158,000	3,000
Nam-Hai Chua	32,000	3,000
John Doerr	38,000	3,000
Geoffrey Duyk	32,000	3,000
Carole Piwnica	38,000	3,000
Fernando de Castro Reinach	38,000	3,000
Sheikh Abdullah bin Khalifa Al Thani	32,000	3,000
Raymond N Williams Total	26,000	3,000

(4) In May 2013, Mr. Williams received an initial stock option award from our 2010 Equity Incentive Plan under the director compensation program as described in "Narrative to Director Compensation Tables" below. In August 2013, each of our non-employee directors other than Mr. Boisseau (and excluding Messrs. Renninger, Pichette and Alexander who resigned from the board prior to the grant date) received an annual stock option award and restricted stock unit award under our 2010 Equity Incentive Plan. Mr. Boisseau declined the annual award. These awards were contemplated by our director compensation program (described in "Narrative to Director Compensation Tables" below). With the exception of the initial director stock option awards granted to Mr. Williams, these option and restricted stock unit awards will become fully vested one year from a vesting commencement date of August 8, 2013. The initial 20,000 options granted to Mr. Williams will vest in quarterly increments over three years from the vesting commencement date of May 9, 2013 at a rate of 1/12 per quarter The grant date fair value for these awards, as calculated under FASB ASC Topic 718 for financial statement reporting purposes was as shown:

Name	Date of Grant	Number of Shares of Stock or Units (#)(1)	Number of Securities Underlying Options ($)(2)	Exercise Price Per Share ($)	Value of Stock and Option Awards ($)(2)
Arthur Levinson	08/01/2013		6,000	2.76	11,593
Arthur Levinson	08/01/2013	3,000		—	8,280
Nam-Hai Chua	08/01/2013		6,000	2.76	11,593
Nam-Hai Chua	08/01/2013	3,000		—	8,280
John Doerr	08/01/2013		6,000	2.76	11,593
John Doerr	08/01/2013	3,000		—	8,280
Geoffrey Duyk	08/01/2013		6,000	2.76	11,593
Geoffrey Duyk	08/01/2013	3,000		—	8,280
Carole Piwnica	08/01/2013		6,000	2.76	11,593
Carole Piwnica	08/01/2013	3,000		—	8,280
Fernando de Castro Reinach	08/01/2013		6,000	2.76	11,593
Fernando de Castro Reinach	08/01/2013	3,000		—	8,280
HH Sheikh Abdullah bin Khalifa Al Thani	08/01/2013		6,000	2.76	11,593
HH Sheikh Abdullah bin Khalifa Al Thani	08/01/2013	3,000		—	8,280
Raymond N Williams Total	05/13/2013		20,000	2.96	41,486
Raymond N Williams Total	08/01/2013		6,000	2.76	11,593
Raymond N Williams Total	08/01/2013	3,000		—	8,280

(5) Dr. Renninger and Messrs. Pichette and Alexander resigned from the Board in February, May and July of 2013, respectively. Such individuals did not receive the annual equity award grants to outside directors. The fees earned by Dr. Renninger, Messrs. Pichette and Alexander in 2013 represent retainer fees earned by such individuals through their respective resignation dates. Mr. Williams joined the Board in June 2013 and the fees earned by Mr. Williams in 2013 represent fees earned for the portion of the year that he served on the Board.

Narrative to Director Compensation Tables

In December 2010, the Board adopted a director compensation program that took effect on January 1, 2011. In February 2012, October 2013 and November 2013, respectively, the Leadership Development and Compensation Committee determined that it would not recommend to the Board any changes to such program for 2012, 2013 or 2014, respectively. Under this program, in each case subject to final approval by the Board with respect to equity awards:

- Each non-employee director receives an annual cash retainer of $40,000, an initial award of an option to purchase 20,000 shares of our common stock upon joining the Board, and an annual award of an option to purchase 6,000 shares and of 3,000 restricted stock units. The initial option award vests in equal quarterly installments over three years, and the annual option and restricted stock unit awards become fully vested after one year.

- The chair of the Audit Committee receives an additional annual cash retainer of $15,000.

- The chair of the Leadership Development and Compensation Committee receives an additional annual cash retainer of $10,000.

- The chair of the Nominating and Governance Committee receives an additional annual cash retainer of $9,000.

- Audit Committee, Leadership Development and Compensation Committee and Nominating and Governance Committee members other than the chair receive an annual retainer of $7,500, $5,000 and $4,500, respectively.

In general, we pay all the retainers described above quarterly in arrears. In cases where a non-employee director serves for part of the year in a capacity entitling him or her to a retainer payment, the retainer is prorated to reflect his or her period of service in that capacity. Non-employee directors are also eligible for reimbursement of their expenses incurred in attending Board meetings.

Compensation Committee Interlocks and Insider Participation

The members of the Leadership Development and Compensation Committee for fiscal year 2013 were Ralph Alexander (through May 2013), Nam-Hai Chua (from May 2013), John Doerr and Carole Piwnica. None of these directors was an officer or employee of Amyris or any of our subsidiaries in fiscal year 2013, nor are any of these directors former officers of Amyris or any of our subsidiaries. Except as set forth under "Transactions with Related Persons" below, none of these directors has any relationships with us of the type that are required to be disclosed under Item 404 of Regulation S-K. None of our executive officers has served as a member of the board of directors or as a member of the compensation or similar committee of any entity that has one or more executive officers who have served on our Board or Leadership Development and Compensation Committee during fiscal year 2013. Messrs. Alexander, Doerr, Chua and Ms. Piwnica may be deemed to have interests in certain transactions with us, as more fully described in "Transactions with Related Persons" below.

Transactions with Related Persons

In addition to the compensation arrangements, including employment, termination of employment and change-in-control and indemnification arrangements, discussed, when required, above under "Executive Compensation — Limitation of Liability and Indemnification," the following is a description of each transaction since the beginning of 2013, and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeds $120,000; and
- any of our directors, executive officers or holders of more than 5% of any class of our capital stock at the time of the transactions in issue, or any immediate family member of or person sharing the household with any of these individuals, had or will have a direct or indirect material interest.

Total Transactions

Collaboration Agreement and Funding

Collaboration

In June 2010, we entered into a technology license, development, research and collaboration agreement with Total (which is an affiliate of our director, Philippe Boisseau, and who beneficially owned approximately 17.8% of our outstanding common stock as of December 31, 2013.) This agreement provided for joint collaboration on the development of products through the use of our synthetic biology platform. In November 2011, we entered into an amendment of the collaboration agreement with Total with respect to development and commercialization of Biofene for diesel. This represented an expansion of the initial collaboration with Total, and established a global, exclusive collaboration for the development of Biofene for diesel and a framework for the creation of a joint venture to manufacture and commercialize Biofene for diesel. In addition, a limited number of other potential products were subject to development for the joint venture on a non-exclusive basis.

In July 2012, we entered into a further amendment of the collaboration agreement with Total that expanded Total's investment in the Biofene collaboration, incorporated the development of certain joint venture products for use in diesel and jet fuel into the scope of the collaboration, and changed the structure of the funding from Total for the collaboration to include a convertible debt mechanism. Under these agreements, (collectively referred to as the "July 2012 Agreements"), the parties would grant exclusive manufacturing and commercial licenses to the joint venture for the joint venture products (diesel and jet fuel from Biofene) when the joint venture is formed. The licenses to the joint venture would be consistent with the principle that development, production and commercialization of the joint venture products in Brazil will remain with us unless Total elects, after formation of the operational joint venture, to have such business contributed to the joint venture (see below for additional detail).

With respect to funding from Total for the collaboration, the July 2012 Agreements established a funding framework with a series of "go/no-go" decisions by Total. Specifically, the July 2012 Agreements provided that Total would fund, through purchases of convertible promissory notes, $38.3 million to us in July 2012 (consisting of $15.0 million of new financing and $23.3 million to repay research and development funding previously provided by Total) and an additional $15.0 million in September 2012. Thereafter, Total would, if it chose to proceed with the program, fund an additional $30.0 million in July 2013 ($10.0 million of which was actually funded in June 2013 due to subsequent agreements between the parties as described below), $10.85 million in July 2014, and $10.85 million in January 2015. Thirty days following the earlier of the completion of the research and development program and December 31, 2016, Total would have a final opportunity to decide whether or not to proceed with the program — a decision point referred to as a "Final Go/No-Go Decision."

At either of the initial decision points tied to the funding described above (in July 2013 or July 2014), if Total decided not to continue to fund the program, the outstanding convertible promissory notes issued under this funding structure would remain outstanding and become payable by us at the maturity date in March 2017, the research and development program and associated agreements would terminate, and all rights granted to Total and joint venture related to Biofene-based diesel and jet fuel would revert to us.

In the Final Go/No-Go Decision, Total could elect to go forward with the full program (encompassing diesel and jet fuel, go forward with only the jet fuel component of the program, or elect to cease its participation in the program entirely). In case of a full go decision, the parties would form an operational diesel and jet fuel joint venture and the outstanding notes would be canceled. In case of a go decision only with respect to jet, the parties would form an operational joint venture only for jet fuel (and the rights associated with diesel would terminate), 70% of the outstanding notes would remain outstanding and become payable by us, and 30% of the outstanding notes would be canceled. In case of a no-go decision, the outstanding notes would remain outstanding as described above for the earlier no-go decision options.

In case of a go decision, if the parties are unable to reach final agreement on the terms (including business plans and budgets) of the operational joint venture, Total would have the right to buy our interest in the operational joint venture. Also, if the operational joint venture is formed, Total would have an option to require us to contribute our Brazil-based fuels business to the operational joint venture at a price based on our historical investment in the Brazil business).

Funding History

Under the July 2012 Agreements, we issued convertible promissory notes (collectively referred to as the "R&D Notes" and which include the Remaining Notes contemplated by Proposal 5 of this Proxy Statement) to Total for an aggregate of $30.0 million in new cash (and to document $23.3 million in previous funding from Total) in the third quarter of 2012 and an additional $30.0 million in new cash in 2013. The purchase agreement provides that additional R&D Notes can be sold in a subsequent closing in July 2014 (for cash proceeds to us of $21.7 million, which would be settled in an initial installment of $10.85 million payable at such closing and a second installment of $10.85 million payable in January 2015).

As discussed above, upon completion of the research and development program, assuming Total makes a final "Go" decision with respect to commercialization of the products that are the subject of the research and development program, we and Total would operationalize a joint venture company that has exclusive rights to produce and market renewable diesel and/or jet fuel. Should Total decide not to pursue commercialization, we are obligated to repay the R&D Notes, or Total may elect to convert the principal amount of the R&D Notes into common stock (at an initial conversion price of $7.0682 per share for those notes issued in 2012, and an initial conversion price of $3.08 per share for those notes issued in 2013 as determined under the "March 2013 Letter Agreement" described below, and a reduced conversion price of $___ for those notes issuable through January 2015 as determined under the "March 2014 Letter Agreement" described below).

Under the July 2012 Agreements, Total was granted a right to participate in our future equity or convertible debt financings through December 31, 2013 to preserve its pro rata ownership. The purchase price for the first $30 million of purchases under this pro rata right could, at Total's option, be paid by cancellation of outstanding R&D Notes held by Total. In December 2012, Total elected to participate in a private placement of our common stock by exchanging approximately $5.0 million of its $53.3 million in senior unsecured convertible promissory notes then outstanding for 1,677,852 of our common stock at a price of $2.98 per share. As such, $5.0 million of the outstanding $53.3 million in senior unsecured convertible promissory notes was cancelled.

In March 2013, we entered into a letter agreement with Total, referred to here as the "March 2013 Letter Agreement," under which Total agreed to waive its right to cease its participation in our fuels collaboration at the July 2013 decision point and committed to proceed with the July 2013 funding tranche of $30.0 million (subject to our satisfaction of the relevant closing conditions for such funding in the purchase agreement). As consideration for this waiver and commitment, we agreed to:

- Reduce the conversion price for the senior unsecured convertible promissory notes to be issued in connection with such 2013 funding from $7.0682 per share to $3.08 per share; and
- Grant Total a senior security interest in our intellectual property, subject to certain exclusions and subject to release by Total when we and Total entered into final documentation regarding the establishment of a pre-operational joint venture entity to, among other things, hold intellectual property licenses that would ultimately, in the event of a go decision, be held by the operational joint venture.

In addition to the waiver by Total described above, Total also agreed that, at our request and contingent upon us meeting our obligations described above, it would pay advance installments of the amounts otherwise payable under the Total Purchase Agreement in July 2013. Specifically, if we requested such advance installments, subject to certain closing conditions and delivery of certifications regarding our cash levels, Total was obligated to fund $10.0 million no later than May 15, 2013, and an additional $10.0 million no later than June 15, 2013, with the remainder to be funded on the original July 2013 closing date.

In June 2013, we sold and issued an R&D Note to Total in the aggregate principal amount of $10.0 million. This note has a conversion price of $3.08 per share in accordance with the March 2013 Letter Agreement. We did not request the May advance described above, but did request the June advance, under which this convertible note was issued. Subsequently, in July 2013, we sold and issued a $20.0 million senior unsecured convertible note to Total with the same conversion price as the note sold to Total in June 2013. This purchase and sale completed Total's commitment to purchase $30.0 million of such notes by July 2013.

In October 2013, we entered into a letter agreement with Total relating to the issuance of a "bridge loan" promissory note to another investor in October 2013 and to the closing of a private placement of convertible promissory notes contemplated by agreements signed in August 2013 discussed below under "Private Placement of Convertible Promissory Notes." In the August 2013 financing agreements, we were required to provide the purchasers with a security interest in our intellectual property if Total still held such security interest as of the initial closing of the August 2013 financing, with such security interest to be released when Total's security interest was released. As discussed above, we had previously granted a security interest in favor of Total to secure our obligations under certain R&D Notes. The agreements relating to that security interest provided that the security interest would terminate if we and Total entered into certain agreements relating to the formation of the interim fuels joint venture as noted above. To induce Total to (i) permit us to grant the security interest required in connection with the August 2013 financing agreements and (ii) waive, with respect to the bridge loan and the August 2013 financing, certain debt limitations contained in our outstanding Total convertible promissory notes, we entered into the October letter agreement. Under the October letter agreement, we agreed to reduce, effective December 2, 2013, the conversion price for the Total convertible promissory notes issued in 2012 from $7.0682 per share to $2.20, the market price per share of our common stock as of the signing of the October letter agreement, unless we and Total entered into the interim joint venture agreements on or prior to such date. Such adjustment did not occur based on the establishment of the joint venture in December 2013. Total's security interest was also released in December 2013.

Also in October 2013, Total canceled $9.2 million of its R&D Notes with a conversion price of $7.0682 as payment for convertible promissory notes issued in the first closing under our August 2013 financing agreements. In January 2014, Total canceled an additional $6.0 million of its R&D Notes with a conversion price of $7.0682 as payment for convertible promissory notes issued in the second closing of our August 2013 financing agreements. These cancellations were completed in accordance with Total's pro rata rights under the July 2012 Agreements described above. The period during which Total could exercise such rights was extended to June 30, 2014 under the agreements relating to the establishment of the interim joint venture described in more detail below under "Joint Venture" and was further extended to the later of December 31, 2014 and the date on which Amyris shall have raised $75 million of equity and convertible debt financing (excluding any convertible promissory notes issued pursuant to the Total Purchase Agreement) pursuant to the March 2014 Letter Agreement.

In December 2013, as discussed in detail below under "Joint Venture," upon establishment of the interim joint venture entity, all of the outstanding R&D Notes were exchanged for replacement notes that were secured by our equity interest in the joint venture entity, but that were otherwise substantially similar.

Terms of R&D Notes

The R&D Notes have a March 1, 2017 maturity date and conversion prices of $3.08 per share and $7.0682 per share, respectively. As of December 31, 2013, after cancellation of certain of the R&D Notes, there was $30.0 million in outstanding principal under R&D Notes with a conversion price of $3.08 per share, and there was $39.0 million in outstanding principal under R&D Notes with a conversion price of $7.0682 per share. The R&D Notes become convertible into Common Stock or payable by Amyris to Total depending on various conditions, including whether or not Total makes "Go" or "No-Go" decisions as described above. Specifically, each R&D Note becomes convertible into our common stock (i) within 10 trading days prior to maturity (if it is not canceled prior to its maturity date based on a go decision), (ii) on a change of control of Amyris, (iii) if Total is no longer our largest stockholder following a no-go decision, and (iv) on our default. If Total makes a final go decision, then the R&D Notes will be exchanged by Total for equity interests in the fuels joint venture contemplated by the collaboration, after which the R&D Notes will not be convertible and any obligation to pay principal or interest on the Note will be extinguished. If Total makes a no-go or a partial go decision, all or a portion of the outstanding R&D Notes will remain outstanding and become payable at maturity. The R&D Notes bear interest of 1.5% per year (with a default rate of 2.5%), accruing from date of funding and payable at maturity or on conversion or a change of control where Total exercises a right to require us to repay the R&D Notes. Accrued interest is canceled if the R&D Notes are canceled based on a go decision.

The conversion price of the R&D Notes is subject to adjustment for proportional adjustments to outstanding common stock and under anti-dilution provisions in case of certain dividends and distributions. Total has a right to require repayment of 101% of the principal amount of the R&D Notes in the event of a change of control of Amyris and the R&D Notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment. The R&D Notes and the associated purchase agreement include covenants regarding payment of interest, maintenance of our listing status, limitations on debt, maintenance of corporate existence, and filing of reports with the Securities and Exchange Commission. The R&D Notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the R&D Notes and purchase agreement, with added default interest rates and associated cure periods applicable to the covenant regarding Securities and Exchange Commission reporting.

Joint Venture

As discussed above under "Collaboration Agreement and Funding", the July 2012 Agreements contemplated establishing a joint venture to commercialize the joint venture products following completion of a research and development program for the joint venture products with a final decision from Total on whether to proceed with commercialization generally due no later than the end of 2016. The July 2012 Agreements contemplated that the parties would form an interim joint venture entity in advance of the completion of the research and development program to provide Total with (i) certainty that the joint venture would receive the proposed intellectual property licenses from us and (ii) an option for Total to purchase our interest in the interim joint venture if we were to experience a financial hardship prior to the formation of the production and commercialization joint venture. Consequently, in November 2013, we and Total formed Total Amyris BioSolutions B.V., ("JVCO"), a private company with limited liability incorporated under the laws of the Netherlands.

In November 2013 and December 2013, we and Total entered into a series of agreements and documents in connection with forming JVCO (collectively referred to as the "JV Documents"). Under the JV Documents, the common equity of JVCO is jointly owned (50%/50%) by us and Total, and the preferred equity of JVCO is 100% owned by us. JVCO's purpose is currently limited to executing the license agreement with respect to certain of our intellectual property (and maintaining such licenses under it), unless and until either (i) Total elects to go forward with either the full (diesel and jet fuel) JVCO commercialization program or the jet fuel component of the JVCO commercialization program, (ii) Total elects to not continue its participation with the research and development program and with JVCO, or (iii) Total exercises any of its rights to buy out the our interest in JVCO as described below. Following a go decision, the articles of incorporation of JVCO and the shareholders agreement entered into in December 2013 (described below) would be amended and restated to be consistent with the shareholders' agreement contemplated by the July 2012 Agreements.

JV Documents

The JV Documents (i) establish the parties' ownership and governing relationship for JVCO during its pre-commercialization phase, (ii) grant an exclusive license to JVCO under our intellectual property to make and sell joint venture products, (iii) secure the funding that Total has provided and may continue to provide to us related to the research and development program, and (iv) provide Total with certain rights to buy out our interest in JVCO before the completion of the research and development program.

The articles of incorporation of JVCO establish the basic structure and governance of JVCO during its pre-commercialization phase, including setting forth JVCO's limited purpose, board composition, classes of stock, and board and stockholder voting rights and procedures. As initial capital contributions for JVCO, we and Total each contributed to JVCO €50,000 in cash, which in our case was borrowed from Total pursuant to a secured promissory note. The articles of incorporation of JVCO generally provide that all actions of JVCO require the unanimous approval of Total and us. In addition to basic corporate structure and governance, the articles of incorporation of JVCO set forth the conditions and processes for Total to purchase our interest in JVCO at fair market value (but no less than the amount outstanding under the R&D Notes, which are secured by interests in JVCO and which replaced the unsecured R&D Notes previously issued to Total) upon the occurrence of certain financial hardship situations for us. If this purchase option is held to be invalid or unenforceable and we attempt to transfer our interest in JVCO to a third party, the articles of incorporation of JVCO also require us to offer Total the opportunity to purchase such interest at the same price and on the same terms as we would sell them to the third party.

Under the shareholders' agreement entered into as part of the JV Documents, in the event of a go decision, Total would purchase 50% of the preferred equity of JVCO from us at a price equal to the amount of outstanding senior secured convertible notes (or 30% of such amount if the go decision only includes the jet fuel component of the collaboration). The shareholders' agreement also enumerates additional events that could occur prior to JVCO commencing commercialization of joint venture products that would enable a JVCO party to buy out the other JVCO party's interest in JVCO at fair market value (but no less than the amount outstanding under the R&D Notes). These pre-commercialization events include a change of control of Total, a change of control of Amyris, and a deadlock with regard to proceeding to JVCO's commercialization phase. In the event of a no-go decision by Total prior to proceeding with JVCO's commercialization phase, JVCO would be wound down. We also entered into an amended and restated master framework agreement (originally one of the July 2012 Agreements) to add an option for Total to purchase our Brazil diesel and jet fuel business at fair market value following any exercise by Total of its buy out rights pursuant to the articles of incorporation of JVCO (in addition to Total's preexisting rights in the master framework agreement entered into in July 2012 to cause Amyris to contribute the Brazil business to JVCO following a go decision or if Total acquires our interest in JVCO in the event of a deadlock as described above, which rights continue and are now set forth in, the December 2013 shareholders' agreement and the master framework agreement). The amended and restated master framework agreement also extended the period during which Total could exercise its pro rata rights (described above under "Collaboration Agreement and Funding") to June 30, 2014, and adjusted the amount of R&D Notes that could be canceled to exercise such right to $15.7 million to reflect previous cancellations of R&D Notes in respect of such right.

Under the license agreement entered into in connection with the JVCO Documents, we granted JVCO an exclusive, world-wide, royalty-free license under our intellectual property to make and sell joint venture products. We also granted JVCO, in the event of a buyout of our interest in JVCO, a non-exclusive, worldwide, royalty-free license to optimize and/or engineer the strains we use to produce farnesene at a commercial quantity, quality and cost for its diesel and jet fuels. In the event of a no-go decision by Total prior to proceeding with JVCO's commercialization phase, the license agreement would terminate.

To secure Total's option to purchase JVCO and right of first offer, (i) our interest in JVCO was transferred to an escrow agent to hold and release to us or to Total in accordance with an escrow agreement, and (ii) we pledged our interest in JVCO to Total as security for the repayment of the senior secured convertible notes pursuant to a deed of pledge. The escrow agreement and the deed of pledge terminate upon either a no-go decision by Total or the entry by the parties to the JVCO into an amended and restated shareholders' agreement following a go decision.

We also entered into a letter agreement with Total providing (i) for the exchange of the then-outstanding $69,047,817 aggregate principal amount of the R&D Notes for an equal principal amount of senior secured convertible notes and (ii) that any R&D Notes that may in the future be purchased and sold at the third closing contemplated by the July 2012 Agreements shall be senior secured convertible notes instead of senior unsecured convertible notes. The terms of the replacement R&D Notes are otherwise substantially similar to the terms of the senior unsecured convertible promissory notes, including conversion prices and terms, interest, covenants and events of default.

Private Placement of Convertible Promissory Notes

August 2013 Financing

In August 2013, we entered into a securities purchase agreement (the "August SPA"), for the sale of two tranches of senior convertible promissory notes (collectively referred to as the "Convertible Notes") to Temasek and Total, each of whom are our existing stockholders. The August SPA contemplates the sale of up to an aggregate of $73.1 million in principal amount of the Convertible Notes in a private placement from registration under the Securities Act of 1933, as amended, in an initial tranche of $42.7 million in aggregate principal amount and a second tranche of $30.5 million in aggregate principal amount.

Amendments to August SPA

In October 2013, we entered into Amendment No. 1 to the August SPA with Temasek, Total and certain entities affiliated with FMR LLC (referred to as the Fidelity Purchasers). Based on a Schedule 13G/A filed by FMR LLC in February 2013, FMR LLC, was a beneficial owner of more than 5% of our outstanding common stock during 2013, including by virtue of certain previously issued convertible promissory notes. The first amendment to the August SPA added the Fidelity Purchasers as purchasers under the August SPA, and provided for the sale of $7.6 million of additional Convertible Notes to the Fidelity Purchasers in the initial tranche. The additional Convertible Notes to be sold to Fidelity also caused an adjustment to the pro rata amount to be purchased by Total in the initial tranche. Also in October 2013, we sold and issued Convertible Notes from the first tranche under the August SPA, as amended, for a total of approximately $51.8 million of the first-tranche notes. At such closing, Temasek purchased $35.0 million of the first-tranche notes through cancellation of the outstanding principal amount of the Temasek bridge note (described below), Total purchased approximately $9.3 million of the first-tranche notes through cancellation of same amount of principal of previously outstanding convertible promissory notes held by Total, and Fidelity purchased approximately $7.6 million of the first-tranche notes through payment of cash.

In December 2013, we agreed to complete an additional private placement for a portion of the second tranche of convertible promissory notes in the amount of approximately $34.0 million. At the closing of this additional private placement, which was completed in January 2014, Temasek purchased $25.0 million of second-tranche notes for cash and certain funds affiliated with Wolverine Asset Management, LLC purchased $3.0 million of second-tranche notes for cash. Total purchased approximately $6.0 million of second-tranche notes through cancellation of the same amount of principal of previously outstanding convertible promissory notes held by Total (in respect of Total's preexisting contractual right to maintain its pro rata ownership position through such cancellation).

Temasek Bridge Note

In October 2013, we sold and issued a senior secured promissory note to Temasek for a bridge loan of $35.0 million. The Temasek bridge note was due on February 2, 2014 and accrued interest at a rate of 5.5% each four months from October 4, 2013 (with a rate of 2% per month applicable if a default occurred). The note was canceled as payment for Temasek's purchase of a first-tranche note in the initial closing of the first-tranche notes under the August SPA, as amended.

Terms of the First Tranche Notes

The first-tranche notes will be due sixty months from the date of issuance and will be convertible into common stock at a conversion price equal to $2.44, which represents a 15% discount to a trailing 60-day weighted-average closing price of the common stock on NASDAQ through August 7, 2013, subject to adjustment as described below. Specifically, the first-tranche notes are convertible at the option of the holder (i) at any time after 18 months from the date of the August SPA, (ii) on a change of control of the Amyris, and (iii) upon the occurrence of an event of default. The conversion price of the first-tranche notes shall be reduced to $2.15 if either (a) a specified manufacturing plant fails to achieve a total production of 1,000,000 liters within a run period of 45 days prior to June 30, 2014, or we fail to achieve gross margins from product sales of at least 5% prior to July 31, 2014, or (b) we reduce the conversion price of certain existing promissory notes held by Total prior to the repayment or conversion of the first-tranche notes;

provided, however, that if both of the conditions described in clauses (a) and (b) occur, the conversion price of the first-tranche notes would be reduced to $1.87. Because we achieved the production milestone of 1,000,000 liters within a run period of 45 days in 2013, it is unlikely that the conversion price of the first-tranche notes would be reduced below $2.15. Each first-tranche note will accrue interest from the date of issuance until the earlier of the date that such first-tranche note is converted into common stock or repaid in full. Interest will accrue at a rate per six months equal to 5.00%, compounded semiannually (with graduated interest rates of 6.5% applicable to the first 180 days and 8% applicable thereafter as the sole remedy should we fail to maintain NASDAQ listing status or at 6.5% for all other defaults). Interest for the first 30 months shall be payable in kind and added to principal every six-months and thereafter, we may continue to pay interest in kind by adding to principal every six-months or may elect to pay interest in cash. We may prepay the first-tranche notes after 30 months from the issuance date and initial interest payment; thereafter we have the option to prepay the first-tranche notes every six months at the date of payment of the semi-annual coupon.

Terms of the Second Tranche Notes

Each second-tranche note will be due five years after the date of the first issuance of the second-tranche notes and will be subject to a conversion price equal to $2.87, which represents a trailing 60-day weighted-average closing price of the common stock on NASDAQ through August 7, 2013, subject to adjustment as described below. Specifically, the second-tranche notes will be convertible at the option of the holder (i) at any time 12 months after issuance, (ii) on a change of control of Amyris, and (iii) upon the occurrence of an event of default. Each second-tranche note will accrue interest from the date of issuance until the earlier of the date that such second-tranche note is converted into common stock or repaid in full. Interest will accrue at a rate per annum equal to 10.00%, compounded annually (with graduated interest rates of 13% applicable to the first 180 days and 16% applicable thereafter as the sole remedy should we fail to maintain NASDAQ listing status or at 12% for all other defaults). Interest for the first 36 months shall be payable in kind and added to principal every year following the issue date and thereafter, we may continue to pay interest in kind by adding to principal on every year anniversary of the issue date or may elect to pay interest in cash.

Additional Terms of the Convertible Notes

In addition to the conversion price adjustments set forth above, the conversion price of the Convertible Notes is subject to further adjustment (i) according to proportional adjustments to outstanding common stock in case of certain dividends and distributions, (ii) according to anti-dilution provisions, and (iii) with respect to Convertible Notes held by any purchaser other than Total, in the event that Total exchanges existing convertible notes for new securities of Amyris in connection with future financing transactions in excess of its pro rata amount. Notwithstanding the foregoing, holders of a majority of the principal amount of the Convertible Notes outstanding at the time of conversion may waive any anti-dilution adjustments to the conversion price. The purchasers have a right to require repayment of 101% of the principal amount of the Convertible Notes in the event of a change of control of Amyris and the Convertible Notes provide for payment of unpaid interest on conversion following such a change of control if the purchasers do not require such repayment. The August SPA, as amended, and Convertible Notes include covenants regarding payment of interest, maintenance of our listing status, limitations on debt and on certain liens, maintenance of corporate existence, and filing of reports with the Securities and Exchange Commission. The Convertible Notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the August SPA and Convertible Notes, with default interest rates and associated cure periods applicable to the covenant regarding Securities and Exchange Commission reporting.

Additional Agreements

The August SPA, as amended, also required that we enter into an amendment no. 5 to the investors' rights agreement with certain of our stockholders. Under such amended investors' rights agreement, certain holders of our outstanding securities can request the filing of a registration statement under the Securities Act of 1933, as amended, covering the shares of common stock held by (or issued upon conversion of other securities, including the Convertible Notes, held by) the requesting holders. Further, under the investors' rights agreement, if we register securities for public sale, our stockholders with registration rights have the right to include their shares of common stock in the registration statement. Additionally, stockholders with registration rights under the investors' rights agreement can request that we register all or a portion of their common stock on Form S-3 if we are eligible to file a registration statement on Form S-3 and the aggregate price to the public of the shares offered is at least $2,000,000. The amendment to the investors' rights agreement extended such rights under the investors' rights agreement to the Convertible Note purchasers who were not already party to the investors' rights agreement.

We also entered into a voting agreement dated August 8, 2013 with certain of our stockholders (Temasek, Total, Naxyris S.A., TPG Biotechnology Partners II, L.P., KPCB Holdings, Inc., Sualk LTD, Biolding Investment SA and certain other stockholders), pursuant to which such stockholders agreed to vote their shares of common stock in favor of transactions contemplated by the August SPA and against any proposal in opposition to transactions contemplated by the August SPA.

Common Stock Offerings

In 2013 we completed private placements of our common stock to investors that included parties related to the members of the Board. In December 2012, we agreed to a private placement of 14,177,849 shares of our common stock to various investors for aggregate proceeds of approximaely $37.2 million, of which $22.2 million in cash was received in December 2012 and $15.0 million in cash was received in January 2013. Consequently, we issued 5,033,557 shares of the 14,177,849 shares of our common stock from such private placement in 2013. The investors under the December 2012 purchase agreement were the following existing stockholders of Amyris: Temasek; Biolding Investment SA; Naxyris SA; Foris Ventures, LLC; Sualk Capital Ltd; TPG Biotechnology Partners II, L.P.; and Total. As part of this private placement, 1,677,852 of such shares of common stock were issued to Total in exchange for the cancellation of $5.0 million worth of an outstanding senior unsecured convertible promissory note we previously issued to Total. In connection with this private placement, we entered into a letter of agreement, dated December 24, 2012 with Biolding under which we acknowledged that Biolding's initial investment of $10.0 million in December 2012 represented partial satisfaction of its preexisting contractual obligation to fund $15.0 million by March 31, 2013 upon satisfaction by us of criteria associated with the commissioning of our production plant in Brotas, Brazil.

In March 2013, we completed a private placement of 1,533,742 of our common stock to Biolding for aggregate proceeds of $5.0 million representing the final tranche of Biolding's preexisting contractual obligation to fund $15.0 million upon our satisfaction of certain milestones at our Brotas, Brazil facility. In the aggregate, we sold approximately 7,258,932 shares of our common stock for approximately $20,000,000 in proceeds from private placements in 2013.

Participation in Common Stock Offerings by Related Parties.

Although none of our executive officers or directors purchased common stock directly in the December 2012 and March 2013 offerings, entities affiliated with certain directors did participate:

- Biolding, an affiliate of our director, HH, purchased shares in the December 2012 and March 2013 offerings. HH was serving on the Board at the time of such offerings.
- Total and Temasek, each a beneficial owner of more than 5% of our outstanding common stock at the time of the transactions and, in the case of Total, an affiliate of our director, Mr. Boisseau, purchased shares of our common stock in both the December 2012 offering; in addition, Temasek's Board designee (pursuant to a February 2012 agreement), Nam-Hai Chua, was serving on the Board at the time of the December 2012 offering.
- Naxyris SA and TPG Biotechnology Partners II, L.P., each a beneficial owner of more than 5% of our outstanding common stock at the time of the December 2012 offering, purchased shares in the December 2012 offering; in addition, Naxyris SA's Board designee (pursuant to a February 2012 agreement), Carole Piwnica, was serving on the Board at the time of both the December 2012 offering, and Geoffrey Duyk, a partner of TPG Biotech, an affiliate of TPG Biotechnology Partners II, L.P., was serving on the Board at the time of the December 2012 offering.

- Foris Ventures LLC and Sualk Capital Ltd, entities affiliated with our existing directors, John Doerr and Fernando de Castro Reinach, respectively, purchased shares of our common stock in the December 2012 offering; in addition, Sualk Capital Ltd's Board designee (pursuant to a February 2012 agreement), Dr. Reinach, was serving on the Board at the time of the December 2012 offering.

Indemnification Arrangements

Please see "Executive Compensation — Limitation of Liability and Indemnification" above for information on our indemnification arrangements with our directors and executive officers.

Executive Compensation and Employment Arrangements

Please see "Executive Compensation" for information on compensation arrangements with our executive officers, including option grants and agreements with executive officers.

Investors' Rights Agreement and Registration Rights Agreements

Please see "Transactions with Related Persons — Total Transactions" and "— Private Placement Financings" for information on the Rights Agreement and on registration rights agreements with certain entities affiliated with our directors or with holders of 5% or more of our outstanding common stock.

Related Person Transaction Policy

Our policy adopted by the Board requires that any transaction with a related party that must be reported under applicable SEC rules, other than compensation related matters, must be reviewed and approved or ratified by our Audit Committee. Another independent body of the Board must provide such approval or ratification if the related party is, or is associated with, a member of the Audit Committee or if it is otherwise inappropriate for the Audit Committee to review the transaction. The Audit Committee has not adopted policies or procedures for review of, or standards for approval of, these transactions.

Householding of Proxy Materials

The Securities and Exchange Commission has adopted rules that permit companies and Intermediaries to satisfy the delivery requirements for proxy statements and annual reports, including Notices of Internet Availability of Proxy Materials, with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other proxy materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

A number of brokers with account holders who are Amyris stockholders may be "householding" our proxy materials. A single copy of the Notice or other proxy materials may be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or you submit contrary instructions. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Notice or other proxy materials, you may: (1) notify your broker; (2) direct your written request to Amyris Investor Relations at 5885 Hollis Street, Suite 100, Emeryville, California 94608 or to investor@amyris.com; or (3) contact Amyris Investor Relations at (510) 740-7481. Stockholders who currently receive multiple copies of the Notice or other proxy materials at their addresses and would like to request "householding" of their communications should contact their brokers. In addition, we will promptly deliver, upon written or oral request to the address or telephone number above, a separate copy of the Notice to a stockholder at a shared address to which a single copy of the documents was delivered.

Available Information

We will provide to any stockholder entitled to vote at our 2014 Annual Meeting of Stockholders, at no charge, a copy of our Annual Report on Form 10-K for fiscal year 2013 filed with the Securities and Exchange Commission on April 2, 2014, including the financial statements and the financial statement schedules

contained in the Form 10-K. We make our Annual Report on Form 10-K, as well as our other SEC filings, available free of charge through the investor relations section of our website located at http://investors.amyris.com/index.cfm as soon as reasonably practicable after they are filed with or furnished to the Securities and Exchange Commission. Information contained on or accessible through our website or contained on other websites is not deemed to be part of Proxy Statement. **In addition, you may request a copy of the Annual Report on Form 10-K in writing by sending an e-mail request to Amyris Investor Relations, attention Joel Velasco, at investor@amyris.com, calling (510) 740-7481, or writing to Amyris Investor Relations at 5885 Hollis Street, Suite 100, Emeryville, California 94608.**

Incorporation of Information by Reference

The Securities and Exchange Commission allows us to "incorporate by reference" certain information we file with the Securities and Exchange Commission, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this Proxy Statement. We incorporate herein the following information contained in or attached to our Annual Report on Form 10-K filed on April 2, 2014 and being delivered to stockholders along with this Proxy Statement: (1) Item 7 entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," (2) Item 7A entitled "Quantitative and Qualitative Disclosures About Market Risk," (3) Item 8 entitled "Financial Statements and Supplementary Data" and (4) Item 9 entitled "Changes in and Disagreements with Accountants on Accounting and Financial Disclosure."

Stockholder Proposals to be Presented at Next Annual Meeting

Stockholder proposals may be included in our proxy statement for an annual meeting so long as they are provided to us on a timely basis and satisfy the other conditions set forth in SEC regulations under Rule 14a-8 regarding the inclusion of stockholder proposals in company-sponsored proxy materials. For a stockholder proposal to be considered for inclusion in our proxy statement for the annual meeting to be held in 2014, we must receive the proposal at our principal executive offices, addressed to the Secretary, no later than December 10, 2013. In addition, a stockholder proposal that is not intended for inclusion in our proxy statement under Rule 14a-8 may be brought before the 2014 annual meeting so long as we receive information and notice of the proposal in compliance with the requirements set forth in our Bylaws, addressed to the Secretary at our principal executive offices, not later than February 23, 2014 nor earlier than January 24, 2014.

Other Matters

The Board knows of no other matters that will be presented for consideration at the annual meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

BY ORDER OF THE BOARD OF DIRECTORS

Nicholas Khadder
SVP, General Counsel and Secretary

Emeryville, California
April 14, 2014

ANNEX A

TOTAL PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (this "Agreement") is made and entered into as of July 30, 2012, by and between Amyris, Inc., a Delaware corporation (the "Company"), and Total Gas & Power USA, SAS, a *société par actions simplifiée* organized under the laws of the Republic of France (the "Purchaser").

BACKGROUND

(A) The Company and Purchaser are parties to that certain Technology License, Development, Research and Collaboration Agreement, entered into as of June 21, 2010, as amended by the First Amendment entered into as of November 23, 2011 (the "Current Collaboration Agreement"), which provides for certain research and development projects under the Amyris-Total Renewable Farnesene Development Project Plan (the "Project Plan") between the Company and Purchaser.

(B) Contemporaneously with the execution of this Agreement, the Company and Purchaser will enter into the Second Amendment to the Current Collaboration Agreement (the "Second Amendment", and the Current Collaboration Agreement, as so amended, the "Collaboration Agreement").

(C) Contemporaneously with the execution of this Agreement, the Company and the Purchaser will execute and deliver a Master Framework Agreement, dated as of July 30, 2012, by and between the Company and the Purchaser (the "Master Framework Agreement").

(D) The Company and Purchaser are executing and delivering this Agreement in reliance upon the exemption from registration afforded by Section 4(2) of the Securities Act of 1933, (the "Securities Act"), and Rule 506 of Regulation D ("Regulation D") as promulgated by the United States Securities and Exchange Commission (the "SEC") under the Securities Act.

(E) The Purchaser desires to purchase, and the Company desires to offer and sell to the Purchaser, up to an aggregate of $105,000,000 in principal amount of its 1.5% Senior Unsecured Convertible Notes due 2017 (individually a "Security" and collectively the "Securities") at the Initial Closing and at any Subsequent Closing (each as hereinafter defined). The Securities will be evidenced by Convertible Notes in the form attached hereto as Exhibit A. The Securities will be convertible into shares (the "Underlying Securities") of the Company's common stock, $0.0001 par value per share (the "Common Stock"), in accordance with the terms of the Securities.

Agreement

The parties, intending to be legally bound, agree as follows:

ARTICLE 1
SALE OF SECURITIES

1.1. Purchase and Sale of Securities.

(a) Initial Closing. Subject to the terms and conditions hereof, at the Initial Closing the Company will sell to the Purchaser, and the Purchaser will purchase from the Company, a Security in the principal amount of Fifty-Three Million Three Hundred Thousand Dollars ($53,300,000), of which Thirty Million Dollars ($30,000,000) shall be paid by the Purchaser in cash in two equal installments of Fifteen Million Dollars ($15,000,000) as specified in Section 2.1(a) below, and of which Twenty-Three Million Three Hundred Thousand Dollars ($23,300,000) shall be retained by the Purchaser pursuant to Section 8.4 (collectively, the "Initial Closing Purchase Price").

(b) Second Closing. Subject to the terms and conditions hereof, at the Second Closing the Company will sell to the Purchaser, and the Purchaser will purchase from the Company, a Security in the principal amount of Thirty Million Dollars ($30,000,000) (the "Second Closing Purchase Price").

(c) Third Closing. Subject to the terms and conditions hereof, at the Third Closing the Company will sell to the Purchaser, and the Purchaser will purchase from the Company, a Security in the principal amount of Twenty-One Million Seven Hundred Thousand Dollars ($21,700,000), which amount shall be paid by the Purchaser in cash in two equal installments of Ten Million Eight Hundred Fifty Thousand Dollars ($10,850,000) as specified in Section 2.1(c) below (the "Third Closing Purchase Price", with each of the Initial Closing Purchase Price, any Second Closing Purchase Price and any Third Closing Purchase Price being referred to herein as a "Purchase Price").

ARTICLE 2
CLOSING; DELIVERY

2.1. Closing.

(a) Initial Closing. The closing of the purchase and sale of the first Fifty-Three Million Three Hundred Thousand Dollars ($53,300,000) in principal amount of Securities by and to the Purchaser hereunder (the "Initial Closing") shall be held at the offices of Shearman & Sterling LLP, Four Embarcadero Center, Suite 3800, San Francisco, California 94111-5994 within one business day following the date on which the last of the conditions set forth in Section 5.1 and Section 6.1 (other than those conditions that by their nature are to be satisfied at the Initial Closing), have been satisfied or waived in accordance with this Agreement but in no event later than July 31, 2012 (such date, the "Initial Closing Date"), or at such other time and place as the Company and the Purchaser mutually agree upon. The settlement of the purchase and sale of the Securities to be purchased and sold at the Initial Closing shall take place in two installments, with the first installment in the principal amount of Thirty-Eight Million Three Hundred Thousand Dollars ($38,300,000) occurring on the Initial Closing Date, such amount to be paid in the manner specified in Sections 5.1(a) and Section 8.4 below, and the second installment in the principal amount of Fifteen Million Dollars ($15,000,000) occurring on September 15, 2012.

(b) Second Closing. The closing of the purchase and sale of the second Thirty Million Dollars ($30,000,000) in principal amount of Securities, if any, by and to the Purchaser hereunder (the "Second Closing") shall be held at the offices of Shearman & Sterling LLP, Four Embarcadero Center, Suite 3800, San Francisco, California 94111-5994 within one business day following the date on which the last of the conditions set forth in Section 5.2 and Section 6.2 applicable to any Second Closing (other than those conditions that by their nature are to be satisfied at any Second Closing) have been satisfied or waived in accordance with this Agreement but in no event later than July 31, 2013 (such date, the "Second Closing Date"), or at such other time and place as the Company and the Purchaser mutually agree upon. The settlement of the purchase and sale of the Securities to be purchased and sold at the Second Closing shall take place in a single installment occurring on the Second Closing Date.

(c) Third Closing. The closing of the purchase and sale of the third Twenty-One Million Seven Hundred Thousand Dollars ($21,700,000) in principal amount of Securities, if any, by and to the Purchaser hereunder (the "Third Closing", with each of the Initial Closing, any Second Closing and any Third Closing being referred to herein as a "Closing", and each of any Second Closing and any Third Closing being referred to herein as a "Subsequent Closing") shall be held at the offices of Shearman & Sterling LLP, Four Embarcadero Center, Suite 3800, San Francisco, California 94111-5994 within one business day following the date on which the last of the conditions set forth in Section 6.2 and Section 7.2 applicable to any Third Closing (other than those conditions that by their nature are to be satisfied at any Third Closing) have been satisfied or waived in accordance with this Agreement but in no event later than July 31, 2014 (such date, the "Third Closing Date", with each of the Initial Closing Date, any Second Closing Date and any Third Closing Date being referred to herein as a "Closing Date", and each of any Second Closing Date and any Third Closing Date being referred to herein as a "Subsequent Closing Date"), or at such other time and place as the Company and the Purchaser mutually agree upon. The settlement of the purchase and sale of the Securities to be purchased and sold at the Third Closing shall take place in two installments, with the first installment in the principal amount of Ten Million Eight Hundred Fifty Thousand Dollars ($10,850,000) occurring on the Third Closing Date, and the second installment in the principal amount of Ten Million Eight Hundred Fifty Thousand Dollars ($10,850,000) occurring on the date that is six (6) months following any Third Closing Date but in no event later than January 31, 2015.

2.2. Delivery.

2.2.1 In each installment under each Closing hereunder, subject to the terms and conditions hereof to be satisfied at the applicable Closing Date, the Company will deliver to the Purchaser the Security to be purchased by and sold to the Purchaser in the applicable installment, in the name of the Purchaser, duly executed by the Company. At the Initial Closing, the Company shall execute and deliver to the Purchaser the Registration Rights Agreement in the form attached hereto as Exhibit B ("Rights Agreement") and the other documents referenced in Section 6.1. In the first installment under each Subsequent Closing, the Company shall execute and deliver to the Purchaser the documents referenced in Section 6.2.

2.2.2 In each installment under each Closing hereunder, subject to the terms and conditions hereof to be satisfied at the applicable Closing Date, the Purchaser will deliver to the Company the Purchase Price for the Security to be purchased by and sold to the Purchaser in the applicable installment by wire transfer of immediately available funds to such account or accounts as the Company shall designate in writing to the Purchaser at least two business days prior to the applicable Closing Date. At the Initial Closing, the Purchaser shall execute and deliver to the Company the Rights Agreement and the other documents referenced in Section 5.1. In the first installment under each Subsequent Closing, the Purchaser shall execute and deliver to the Company the documents referenced in Section 5.2.

ARTICLE 3
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company represents, warrants and covenants to the Purchaser, except as set forth in the disclosure letter supplied by the Company to the Purchaser dated as of the date hereof (in the case of the Initial Closing), as of the Second Closing Date (in the case of the Second Closing), or as of the Third Closing Date (in the case of the Third Closing), which exceptions shall be deemed to be part of the representations and warranties made hereunder as provided therein, as follows:

3.1. Organization and Standing. The Company and each of its subsidiaries is duly incorporated, validly existing, and in good standing under the laws of the jurisdiction of its organization. Each of the Company and its subsidiaries has all requisite power and authority to own and operate its respective properties and assets and to carry on its respective business as presently conducted and as proposed to be conducted. The Company and each of its subsidiaries is qualified to do business as a foreign entity in every jurisdiction in which the failure to be so qualified would have, or would reasonably be expected to have, a material adverse effect, individually or in the aggregate, upon the business, properties, tangible and intangible assets, liabilities, operations, prospects, financial condition or results of operation of the Company and its subsidiaries or the ability of the Company or any of its subsidiaries to perform their respective obligations under the Transaction Agreements (as defined below) (a "Material Adverse Effect").

3.2. Subsidiaries. As used in this Agreement, references to any "subsidiary" of a specified Person shall refer to an Affiliate controlled by such Person directly, or indirectly through one or more intermediaries, as such terms are used in and construed under Rule 405 under the Securities Act (which, for the avoidance of doubt, shall include the Company's controlled joint ventures, including shared-controlled joint ventures). The Company's subsidiaries as of the date hereof are listed on Exhibit 21.01 to the Company's Annual Report on Form 10-K for the year ended December 31, 2011 and, except as Previously Disclosed (as defined in Section 3.10) are the only subsidiaries, direct or indirect, of the Company as of the date hereof. All the issued and outstanding shares of each subsidiary's capital stock have been duly authorized and validly issued, are fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities, and, except as Previously Disclosed, are owned by the Company or a Company subsidiary free and clear of all liens, encumbrances and equities and claims. As used herein, "Person" shall mean any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof, and an "Affiliate" means, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person.

3.3. Power. The Company has all requisite power to execute and deliver this Agreement, to sell and issue the Securities hereunder, and to carry out and perform its obligations under the terms of this Agreement, the Rights Agreement and the Securities (together, the "Transaction Agreements").

3.4. Authorization. The execution, delivery, and performance of the Transaction Agreements by the Company has been duly authorized by all requisite action on the part of the Company and its officers, directors and stockholders, and the Transaction Agreements constitute the legal, valid, and binding obligations of the Company enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally, and (b) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies (together, the "Enforceability Exceptions").

3.5. Consents and Approvals. Except for any Current Report on Form 8-K or Notice of Exempt Offering of Securities on Form D to be filed by the Company in connection with the transactions contemplated hereby, the Company is not required to give any notice to, make any filing with, or obtain any authorization, consent, or approval of any government or governmental agency in order to consummate the transactions contemplated by the Transaction Agreements. No consent, approval, authorization or other order of, or registration, qualification or filing with, any court, regulatory body, administrative agency, self-regulatory organization, stock exchange or market (including The NASDAQ Stock Market), or other governmental body is required for the execution and delivery of these Transaction Agreements, the valid, sale and delivery of the Securities to be sold pursuant to this Agreement other than such as have been made or obtained, or for any securities filings required to be made under federal or state securities laws applicable to the offering of the Securities.

3.6. Non-Contravention. The execution and delivery of the Transaction Agreements, the issuance, sale and delivery of the Securities (including the issuance of the Underlying Securities upon conversion thereof) to be sold by the Company under this Agreement, the performance by the Company of its obligations under the Transaction Agreements and/or the consummation of the transactions contemplated thereby will not (a) conflict with, result in the breach or violation of, or constitute (with or without the giving of notice or the passage of time or both) a violation of, or default under, (i) any bond, debenture, note or other evidence of indebtedness, or under any lease, license, franchise, permit, indenture, mortgage, deed of trust, loan agreement, joint venture or other agreement or instrument to which the Company or any subsidiary is a party or by which it or its properties may be bound or affected, (ii) the Company's Restated Certificate of Incorporation, as amended and as in effect on the date hereof (the "Certificate of Incorporation"), the Company's Bylaws, as amended and as in effect on the date hereof (the "Bylaws"), or the equivalent document with respect to any subsidiary, as amended and as in effect on the date hereof, or (iii) any statute or law, judgment, decree, rule, regulation, ordinance or order of any court or governmental or regulatory body (including The NASDAQ Stock Market), governmental agency, arbitration panel or authority applicable to the Company, any of its subsidiaries or their respective properties, except in the case of clauses (i) and (iii) for such conflicts, breaches, violations or defaults that would not be likely to have, individually or in the aggregate, a Material Adverse Effect, or (b) result in the creation or imposition of any lien, encumbrance, claim, security interest or restriction whatsoever upon any of the material properties or assets of the Company or any of its subsidiaries or an acceleration of indebtedness pursuant to any obligation, agreement or condition contained in any material bond, debenture, note or any other evidence of indebtedness or any material indenture, mortgage, deed of trust or any other agreement or instrument to which the Company or any if its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company is subject. For purposes of this Section 3.6, the term "material" shall apply to agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound involving obligations (contingent or otherwise) of, or payments to, the Company in excess of $100,000 in a consecutive 12-month period.

3.7. The Securities. The Securities have been duly authorized by the Company and, when duly executed and delivered and paid for as provided herein, will be duly and validly issued and outstanding and will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms, subject to the Enforceability Exceptions.

3.8. The Underlying Securities. Upon issuance and delivery of the Securities in accordance with this Agreement, the Securities will be convertible into shares of the Underlying Securities in accordance with the terms of the Securities; the Underlying Securities reserved for issuance upon conversion of the Securities have been duly authorized and reserved and, when issued upon conversion of the Securities in accordance with the terms of the Securities, will be validly issued, fully paid and non-assessable, and the issuance of the Underlying Securities will not be subject to any preemptive or similar rights.

3.9. No Registration. Assuming the accuracy of each of the representations and warranties of the Purchaser herein, the issuance by the Company of the Securities (including the issuance of the Underlying Securities upon conversion thereof) is exempt from registration under the Securities Act of 1933, as amended (the "Securities Act").

3.10. Reporting Status. The Company is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and has, in a timely manner, filed all documents and reports that the Company was required to file pursuant to Section I.A.3.b of the General Instructions to Form S-3 promulgated under the Securities Act in order for the Company to be eligible to use Form S-3 for the two years preceding the Initial Closing Date (in the case of the Initial Closing), the Second Closing Date (in the case of the Second Closing), or the Third Closing Date (in the case of the Third Closing), or such shorter time period as the Company has been subject to such reporting requirements (the foregoing materials, together with any materials filed by the Company under the Exchange Act, whether or not required, collectively, the "SEC Documents"). The SEC Documents complied as to form in all material respects with requirements of the Securities Act and Exchange Act and the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC") promulgated thereunder (collectively, the "SEC Rules"), and none of the SEC Documents and the information contained therein, as of their respective filing dates, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As used in this Agreement, "Previously Disclosed" means information set forth in or incorporated by reference into the SEC Documents filed with the SEC on or after February 28, 2012 but prior to the Business Day immediately prior to the date hereof (in the case of the Initial Closing), the Business Day immediately prior to the Second Closing Date (in the case of the Second Closing), or the Business Day immediately prior to the Third Closing Date (in the case of the Third Closing) (except for risks and forward-looking information set forth in the "Risk Factors" section of the applicable SEC Documents or in any forward-looking statement disclaimers or similar statements that are similarly non-specific and are predictive or forward-looking in nature). The Company is eligible to register the Underlying Securities for resale by the Purchaser using Form S-3 promulgated under the Securities Act.

3.11. Contracts. Each indenture, contract, lease, mortgage, deed of trust, note agreement, loan or other agreement or instrument of a character that is required to be described or summarized in the SEC Documents or to be filed as an exhibit to the SEC Documents under the SEC Rules (collectively, the "Material Contracts") is so described, summarized or filed. The Material Contracts to which the Company or its subsidiaries are a party have been duly and validly authorized, executed and delivered by the Company and constitute the legal, valid and binding agreements of the Company or its subsidiaries, as applicable, enforceable by and against the Company or its subsidiaries, as applicable, in accordance with their respective terms, subject to the Enforceability Exceptions

3.12. Capitalization. Immediately prior to the Initial Closing, the authorized capital stock of the Company consists of (a) 100,000,000 shares of Common Stock, $0.0001 par value per share, 58,739,226 shares of which are issued and outstanding as of the date hereof, and (b) 5,000,000 shares of Preferred Stock, $0.0001 par value per share, of which no shares were issued and outstanding. All subscriptions, warrants, options, convertible securities, and other rights (contingent or other) to purchase or otherwise acquire equity securities of the Company issued and outstanding as of the date hereof, or material contracts, commitments, understandings, or arrangements by which the Company or any of its subsidiaries is or may be obligated to issue shares of capital stock, or securities or rights convertible or exchangeable for shares of capital stock, are as set forth in the SEC Documents. The issued and outstanding shares of the Company's capital stock have been duly authorized and validly issued, are fully paid and nonassessable, have been issued in compliance with all applicable federal and state securities laws, and were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities. Except as Previously Disclosed, no holder of the Company's capital stock is entitled to preemptive or similar rights. The Company has delivered to the Purchaser copies of all agreements to which the Company is a party related to the Company's securities with any securityholder of the Company, other than (i) any agreement with Purchaser, (ii) any agreement which has been filed as an exhibit to the SEC Documents, and (iii) any agreement related to employee equity grants or awards. There are no bonds, debentures, notes or other indebtedness having general voting rights (or convertible into securities having such rights) of the Company issued and outstanding. Except as Previously Disclosed, there are no agreements or arrangements under which the Company or any of its subsidiaries is obligated to register the sale of any of their securities under the Securities Act. The Company has made available to the Purchaser a true, correct and complete copy of the Company's Certificate of Incorporation and Bylaws.

3.13. Legal Proceedings. Except as Previously Disclosed, there is no action, suit or proceeding before any court, governmental agency or body, domestic or foreign, now pending or, to the knowledge of the Company, threatened against the Company or its subsidiaries wherein an unfavorable decision, ruling or finding would reasonably be expected to, individually or in the aggregate, (i) materially adversely affect the validity or enforceability of, or the authority or ability of the Company to perform its obligations under this Agreement or (ii) have a Material Adverse Effect. The Company is not a party to or subject to the provisions of any injunction, judgment, decree or order of any court, regulatory body, administrative agency or other governmental agency or body that might have, individually or in the aggregate, a Material Adverse Effect.

3.14. No Violations.

(a) Neither the Company nor any of its subsidiaries is in violation of its respective certificate of incorporation, bylaws or other organizational documents, or to its knowledge, is in violation of any statute or law, judgment, decree, rule, regulation, ordinance or order of any court or governmental or regulatory body (including The NASDAQ Stock Market), governmental agency, arbitration panel or authority applicable to the Company or any of its subsidiaries, which violation, individually or in the aggregate, would be reasonably likely to have a Material Adverse Effect. Neither the Company nor any of its subsidiaries is in default (and there exists no condition which, with or without the passage of time or giving of notice or both, would constitute a default) in the performance of any bond, debenture, note or any other evidence of indebtedness in any indenture, mortgage, deed of trust or any other material agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or by which the properties of the Company are bound, which would be reasonably likely to have a Material Adverse Effect. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the SEC involving the Company or any current or former director or officer of the Company and the Company is not an "ineligible issuer" pursuant to Rules 164, 405 and 433 under the Securities Act. The Company has not received any comment letter from the SEC relating to any SEC Documents which has not been finally resolved. The SEC has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act.

(b) The Company is not in default (and there exists no condition which, with or without the passage of time or giving of notice or both, would constitute a default) in the performance of any outstanding Securities.

3.15. Governmental Permits; FDA Matters.

(a) Permits. The Company and its subsidiaries possess all necessary franchises, licenses, certificates and other authorizations from any foreign, federal, state or local government or governmental agency, department or body that are currently necessary for the operation of their respective businesses as currently conducted, except where such failure to possess would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such permit which, if the subject of an unfavorable decision, ruling or finding, could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(b) EPA and FDA Matters. As to each of the manufacturing processes, intermediate products and research or commercial products of the Company and each of its subsidiaries, including, without limitation, products or compounds currently under research and/or development by the Company, subject to the jurisdiction of the United States Environmental Protection Agency ("EPA") under the Toxic

Substances Control Act and regulations thereunder ("TSCA") or the Food and Drug Administration ("FDA") under the Federal Food, Drug and Cosmetic Act and the regulations thereunder ("FDCA") (each such product, a "Life Science Product"), such Life Science Product is being researched, developed, manufactured, tested, distributed and/or marketed in compliance in all material respects with all applicable requirements under the FDCA and TSCA and similar laws and regulations applicable to such Life Science Product, including those relating to investigational use, premarket approval, good manufacturing practices, labeling, advertising, record keeping, filing of reports and security. The Company has not received any notice or other communication from the FDA, EPA or any other federal, state or foreign governmental entity (i) contesting the premarket approval of, the uses of or the labeling and promotion of any Life Science Product or (ii) otherwise alleging any violation by the Company of any law, regulation or other legal provision applicable to a Life Science Product. Neither the Company, nor any officer, employee or agent of the Company has made an untrue statement of a material fact or fraudulent statement to the FDA or other federal, state or foreign governmental entity performing similar or equivalent functions or failed to disclose a material fact required to be disclosed to the FDA or such other federal, state or foreign governmental entity.

3.16. Listing Compliance. The Company is in compliance with the requirements of the NASDAQ Global Select Market for continued listing of the Common Stock thereon and has no knowledge of any facts or circumstances that could reasonably lead to delisting of its Common Stock from the NASDAQ Global Select Market. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or the listing of the Common Stock on the NASDAQ Global Select Market, nor has the Company received any notification that the SEC or the NASDAQ Global Select Market is contemplating terminating such registration or listing. The transactions contemplated by the Transaction Agreements will not contravene the rules and regulations of the NASDAQ Global Select Market. The Company will comply with all requirements of the NASDAQ Global Select Market with respect to the issuance of the Securities (including the issuance of the Underlying Securities upon conversion thereof), including the filing of any additional listing notice with respect to the issuance of the Securities (including the issuance of the Underlying Securities upon conversion thereof).

3.17. Intellectual Property.

(a) The Company and/or the subsidiaries owns or possesses, free and clear of all encumbrances, all legal rights to all intellectual property and industrial property rights and rights in confidential information, including all (i) patents, patent applications, invention disclosures, and all related continuations, continuations-in-part, divisional, reissues, re-examinations, substitutions and extensions thereof, (ii) trademarks, trademark rights, service marks, service mark rights, corporate names, trade names, trade name rights, domain names, logos, slogans, trade dress, design rights, and other similar designations of source or origin, together with the goodwill symbolized by and of the foregoing, (iii) trade secrets and all other confidential information, ideas, know-how, inventions, proprietary processes, formulae, models, and other methodologies, (iv) copyrights, (v) computer programs (whether in object code, subject code or other form), algorithms, databases, compilations and data, technology supporting the foregoing, and all related documentation, (vi) licenses to any of the foregoing, and (vii) all applications and registrations of the foregoing, and (viii) all other similar proprietary rights (collectively, "Intellectual Property") used or held for use in, or necessary for the conduct of their businesses as now conducted and as proposed to be conducted, and neither the Company nor any of its subsidiaries (i) has received any communications alleging that either the Company or any of the subsidiaries has violated, infringed or misappropriated or, by conducting their businesses as now conducted and as proposed to be conducted, would violate, infringe or misappropriate any of the Intellectual Property of any other Person, (ii) knows of any basis for any claim that the Company or any of the subsidiaries has violated, infringed or misappropriated, or, by conducting their businesses as now conducted and as proposed to be conducted, would violate, infringe or misappropriate any of the Intellectual Property of any other Person, and (iii) knows of any third-party infringement, misappropriation or violation of any Company or any Company subsidiary's Intellectual Property. The Company has taken and takes reasonable security measures to protect the secrecy, confidentiality and value of its Intellectual Property, including requiring all Persons with access thereto to enter into appropriate non-disclosure agreements. To the knowledge of the Company, there has not been any disclosure of any material trade secret of the Company or a Company subsidiary (including any such information of any other Person disclosed in confidence to the Company) to any other Person in a manner that has resulted or is likely to result in the loss of trade secret in and to such information. Except as Previously Disclosed, and except as would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, there are no outstanding options, licenses or agreements, claims, encumbrances or shared ownership interests of any kind relating to the Company's or the subsidiaries' Intellectual Property, nor is the Company or the subsidiaries bound by or a party to any options, licenses or agreements of any kind with respect to the Intellectual Property of any other Person.

(b) To the Company's knowledge, none of the employees of the Company or the subsidiaries are obligated under any contract (including, without limitation, licenses, covenants or commitments of any nature or contracts entered into with prior employers), or subject to any judgment, decree or order of any court or administrative agency, that would interfere with the use of his or her best efforts to promote the interests of the Company or the subsidiaries or would conflict with their businesses as now conducted and as proposed to be conducted. Neither the execution nor delivery of the Transaction Agreements will conflict with or result in a breach of the terms, conditions or provisions of, or constitute a default under any contract, covenant or instrument under which the Company or the subsidiaries or any of the employees of the Company or the subsidiaries is now obligated, and neither the Company nor the subsidiaries will need to use any inventions that any of its employees, or persons it currently intends to employ, have made prior to their employment with the Company or the subsidiaries, except for inventions that have been assigned or licensed to the Company or the subsidiaries as of the applicable Closing Date. Each current and former employee or contractor of the Company or the subsidiaries that has developed any Intellectual Property owned or purported to be owned by the Company or the subsidiaries has executed and delivered to the Company a valid and enforceable Invention Assignment and Confidentiality Agreement that (i) assigns to the Company or such subsidiaries all right, title and interest in and to any Intellectual Property rights arising from or developed or delivered to the Company or such subsidiaries in connection with such person's work for or on behalf of the Company or such subsidiaries, and (ii) provides reasonable protection for the trade secrets, know-how and other confidential information (1) of the Company or such subsidiaries and (2) of any third party that has disclosed same to the Company or such subsidiaries. To the knowledge of the Company, no current or former employee, officer, consultant or contractor is in default or breach of any term of any employment, consulting or contractor agreement, non-disclosure agreement, assignment agreement, or similar agreement. Except as Previously Disclosed, to the knowledge of the Company, no present or former employee, officer, consultant or contractor of the Company has any ownership, license or other right, title or interest, directly or indirectly, in whole or in part, in any Intellectual Property that is owned or purported to be owned, in whole or part, by the Company or the subsidiaries.

3.18. Financial Statements. The consolidated financial statements of the Company and its subsidiaries and the related notes thereto included in the SEC Documents (the "Financial Statements") comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing and present fairly, in all material respects, the financial position of the Company and its subsidiaries as of the dates indicated and the results of its operations and cash flows for the periods therein specified subject, in the case of unaudited statements, to normal year-end audit adjustments. Except as set forth in such Financial Statements (or the notes thereto), such Financial Statements (including the related notes) have been prepared in accordance with U.S. generally accepted accounting principles applied on a consistent basis throughout the periods therein specified ("GAAP"). Except as set forth in the Financial Statements, neither the Company nor the subsidiaries has any material liabilities other than liabilities and obligations that have arisen in the ordinary course of business and which would not be required to be reflected in financial statements prepared in accordance with GAAP.

3.19. Accountants. PricewaterhouseCoopers LLP (with respect to the Initial Closing) or any "Big Four" or "Second Six" independent audit firm then engaged by the Company (with respect to any Subsequent Closing), which has expressed its opinion with respect to the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2011 (with respect to the Initial Closing), December 31, 2012 (with respect to the Second Closing), or December 31, 2013 (with respect to the Third Closing), are, or with respect to the Second Closing and Third Closing will be at the time of the issuance of the applicable opinion, registered independent public accountants as required by the Exchange Act and the rules and regulations promulgated thereunder (and by the rules of the Public Company Accounting Oversight Board). In the case of the Initial Closing, as of the date hereof, the Company does not expect that the disclosure to be included in the Company's Quarterly Report on Form 10-Q for the three months ended June 30, 2012 in Note 1 of Notes to Unaudited Condensed Consolidated Financial Statements and under the headings "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview — Liquidity" and "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources" will be materially different with respect to the Company's need for additional funds than such disclosure as was provided under such headings in the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2012, and in the case of each Subsequent Closing, as of the date of such Subsequent Closing, the Company does not expect that the disclosure to be included in the Company's Quarterly Report on Form 10-Q for the three month quarterly reporting period ended immediately prior to such Subsequent Closing in Note 1 of Notes to Unaudited Condensed Consolidated Financial Statements and under the headings "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview — Liquidity" and "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources" will be materially different with respect to the Company's need for additional funds than such disclosure as was provided under such headings in the Company's most recently filed Quarterly Report on Form 10-Q.

3.20. Internal Accounting Controls. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has disclosure controls and procedures (as defined in Rules 13a-14 and 15d-14 under the Exchange Act) that are effective and designed to ensure that (i) information required to be disclosed in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified by the SEC Rules, and (ii) such information is accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure. The Company is otherwise in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002, as amended and the rules and regulations promulgated thereunder.

3.21. Off-Balance Sheet Arrangements. There is no transaction, arrangement or other relationship between the Company or its subsidiaries and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in its Exchange Act filings and is not so disclosed or that otherwise would be reasonably likely to have, individually or in the aggregate, a Material Adverse Effect. There are no such transactions, arrangements or other relationships with the Company that may create contingencies or liabilities that are not otherwise disclosed by the Company in its Exchange Act filings.

3.22. No Material Adverse Change. Except as set forth in the SEC Documents in each case, filed or made through and including the applicable Closing Date, since December 31, 2011 (with respect to the Initial Closing), December 31, 2012 (with respect to the Second Closing), or December 31, 2013 (with respect to the Third Closing):

(a) there has not been any event, occurrence or development that, individually or in the aggregate, has had or that could reasonably be expected to result in a Material Adverse Effect,

(b) the Company has not incurred any liabilities (contingent or otherwise) other than (1) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (2) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or not required to be disclosed in filings made with the SEC,

(c) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock other than routine withholding in accordance with the Company's existing stock-based plan,

(d) the Company has not altered its method of accounting or the identity of its auditors, except as Previously Disclosed,

(e) the Company has not issued any equity securities except (i) pursuant to the Company's existing stock-based plans, or (ii) as otherwise Previously Disclosed; and

(f) there has not been any loss or damage (whether or not insured) to the physical property of the Company or any of its subsidiaries.

3.23. Solvency. The Company is not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur at the applicable Closing (assuming for this purpose that, in the case of the Initial Closing and the Third Closing, the payment to be made in the second installment of such Closing was instead made concurrent with such Closing), will not be Insolvent (as defined below). For purposes of this Section, "Insolvent" means, with respect to any Person, (i) the present fair saleable value of such Person's assets is less than the amount required to pay such Person's total indebtedness, (ii) such Person is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) such Person intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) such Person has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is currently proposed to be conducted.

3.24. No Manipulation of Stock. Neither the Company nor any of its subsidiaries, nor to the Company's knowledge, any of their respective officers, directors, employees, Affiliates or controlling Persons has taken and will not, in violation of applicable law, take, any action designed to or that might reasonably be expected to, directly or indirectly, cause or result in stabilization or manipulation of the price of the Common Stock.

3.25. Insurance. The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the subsidiaries are engaged. The Company and its subsidiaries will continue to maintain such insurance or substantially similar insurance, which covers the same risks at the same levels as the existing insurance with insurers which guarantee the same financial responsibility as the current insurers, and neither the Company nor any subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

3.26. Properties. The Company and its subsidiaries have good and marketable title to all the properties and assets (both tangible and intangible) described as owned by them in the consolidated financial statements included in the SEC Documents, free and clear of all liens, mortgages, pledges, or encumbrances of any kind except (i) those, if any, reflected in such consolidated financial statements (including the notes thereto), or (ii) those that are not material in amount and do not adversely affect the use made and proposed to be made of such property by the Company or its subsidiaries. The Company and each of its subsidiaries hold their leased properties under valid and binding leases. The Company and each of its subsidiaries own or lease all such properties as are necessary to its operations as now conducted.

3.27. Tax Matters. The Company and the subsidiaries have filed all Tax Returns, and these Tax Returns are true, correct, and complete in all material respects. The Company and each subsidiary (i) have paid all Taxes that are due from the Company or such subsidiary for the periods covered by the Tax Returns or (ii) have duly and fully provided reserves adequate to pay all Taxes in accordance with GAAP. No agreement as to indemnification for, contribution to, or payment of Taxes exists between the Company or any subsidiary, on the one hand, and any other Person, on the other, including pursuant to any Tax sharing agreement, lease agreement, purchase or sale agreement, partnership agreement or any other agreement not entered into in the ordinary course of business. Neither the Company nor any of its subsidiaries has any liability for Taxes of any Person (other than the Company or any of its subsidiaries) under Treasury Regulation Section 1.1502-6 (or any similar provision of any state, local or foreign law), or as a transferee or successor, by contract or otherwise. Since the date of the Company's most recent Financial Statements, the Company has not incurred any liability for Taxes other than in the ordinary course of business consistent with past practice. Neither the Company nor the subsidiaries has been advised (a) that any of its Tax Returns have been or are being audited as of the date hereof, or (b) of any deficiency in assessment or proposed judgment to its Taxes. Neither the Company nor any of its subsidiaries has knowledge of any Tax liability to be imposed upon its properties or assets as of the date of this Agreement that is not adequately provided for. The Company has not distributed stock of another corporation, or has had its stock distributed by another corporation, in a transaction that was governed, or purported or intended to be governed, in whole or in part, by Section 355 of the Internal Revenue Code (i) in the two years prior to the date of this Agreement or (ii) in a distribution that could otherwise constitute part of a "plan" or "series of related transactions" (within the meaning of Section 334(e) of the Internal Revenue Code) in conjunction with the purchase of the Securities. "Tax" or "Taxes" means any foreign, federal, state or local income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall, profits, environmental, customs, capital stock, franchise, employees' income withholding, foreign or domestic withholding, social security, unemployment, disability, real property, personal property, sales, use, transfer, value added, alternative or add-on minimum or other similar tax, governmental fee, governmental assessment or governmental charge, including any interest, penalties or additions to Taxes or additional amounts with respect to the foregoing. "Tax Returns" means all returns, reports, or statements required to be filed with respect to any Tax (including any elections, notifications, declarations, schedules or attachments thereto, and any amendment thereof) including any information return, claim for refund, amended return or declaration of estimated Tax.

3.28. Investment Company Status. The Company is not, and immediately after receipt of payment for the Securities will not be, an "investment company," an "affiliated person" of, "promoter" for or "principal underwriter" for, or an entity "controlled" by an "investment company," within the meaning of the Investment Company Act of 1940, as amended, or the rules and regulations promulgated thereunder.

3.29. Transactions With Affiliates and Employees. Except as Previously Disclosed, none of the officers or directors of the Company or its subsidiaries and, to the knowledge of the Company, none of the employees of the Company or its subsidiaries is presently a party to any transaction with the Company or any subsidiary (other than for services as employees, officers and directors required to be disclosed under Item 404 of Regulation S-K under the Exchange Act).

3.30. Foreign Corrupt Practices. Neither the Company nor its subsidiaries or Affiliates, any director or officer, nor to the knowledge of the Company, any agent, employee or other Person acting on behalf of the Company or its subsidiaries has, in the course of its actions for, or on behalf of, the Company or any of its subsidiaries (a) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity, (b) made or promised to make any direct or indirect unlawful payment to any foreign or domestic government official or employee (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or of any political party or part official or candidate for political office (each such person, a "Government Official")) from corporate funds, (c) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended or (d) made or promised to make any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic Government Official.

3.31. Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, and the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Title III of Pub. L. 107-56 (signed into law on October 26, 2001)), applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the Company's knowledge, threatened.

3.32. OFAC. Neither the Company, any director or officer, nor, to the Company's knowledge, any agent, employee, subsidiary or Affiliate of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"); and the

Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person, for the purpose of financing the activities of any Person currently subject to any U.S. sanctions administered by OFAC.

3.33. Environmental Laws. The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole. There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, have a Material Adverse Effect on the Company and its subsidiaries, taken as a whole.

3.34. Employee Relations. Neither the Company nor any of its subsidiaries is a party to any collective bargaining agreement or employs any member of a union. Neither the Company nor any of its subsidiaries is engaged in any unfair labor practice. There is (i) (x) no unfair labor practice complaint pending or, to the Company's knowledge, threatened against the Company or any of its subsidiaries before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or threatened, (y) no strike, labor dispute, slowdown or stoppage pending or, to the Company's knowledge, threatened against the Company or any of its subsidiaries and (z) no union representation dispute currently existing concerning the employees of the Company or any of its subsidiaries, and (ii) to the Company's knowledge, (x) no union organizing activities are currently taking place concerning the employees of the Company or any of its subsidiaries and (y) there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees or any applicable wage or hour laws. No executive officer of the Company (as defined in Rule 501(f) promulgated under the Securities Act) has notified the Company that such officer intends to leave the Company or otherwise terminate such officer's employment with the Company. No executive officer of the Company, to the knowledge of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company or any of its subsidiaries to any liability with respect to any of the foregoing matters.

3.35. ERISA. The Company and its subsidiaries are in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder (herein called "ERISA"); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company or any of its subsidiaries would have any liability; the Company has not incurred and does not expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan"; or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "Code"); and each "Pension Plan" for which the Company would have liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.

3.36. Obligations of Management. To the Company's knowledge, each officer and key employee of the Company or the subsidiaries is currently devoting substantially all of his or her business time to the conduct of the business of the Company or the subsidiaries, respectively. The Company is not aware that any officer or key employee of the Company or the subsidiaries is planning to work less than full time at the Company or the subsidiaries, respectively, in the future. To the Company's knowledge, no officer or key employee is currently working or plans to work for a competitive enterprise, whether or not such officer or key employee is or will be compensated by such enterprise. To the Company's knowledge, no officer or person currently nominated to become an officer of the Company or the subsidiaries is or has been subject to any judgment or order of, the subject of any pending civil or administrative action by the SEC or any self-regulatory organization.

3.37. Integration; Other Issuances of Securities. Neither the Company nor its subsidiaries or any Affiliates, nor any Person acting on its or their behalf, has issued any shares of Common Stock or shares of any series of preferred stock or other securities or instruments convertible into, exchangeable for or otherwise entitling the holder thereof to acquire shares of Common Stock which would be integrated with the sale of the Securities to the Purchaser at the applicable Closing for purposes of the Securities Act or of any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of The NASDAQ Stock Market, nor will the Company or its subsidiaries or Affiliates take any action or steps that would require registration of any of the Securities under the Securities Act or cause the offering of the Securities at the applicable Closing to be integrated with other offerings if any such integration would cause the issuance of the Securities hereunder at the applicable Closing to fail to be exempt from registration under the Securities Act as provided in Section 3.9 above or cause the transactions contemplated hereby to contravene the rules and regulations of the NASDAQ Global Select Market.

3.38. No General Solicitation. Neither the Company nor its subsidiaries or any Affiliates, nor any Person acting on its or their behalf, has offered or sold any of the Securities by any form of general solicitation or general advertising.

3.39. No Brokers' Fees. The Company has not incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

3.40. Registration Rights. Except as set forth in (i) the Amended and Restated Investors' Rights Agreement dated June 21, 2010, by and between the Company and the parties listed on Exhibits A through G thereof, as amended by Amendment Number 1 thereto dated as of February 23, 2012, (ii) the Registration Rights Agreement dated February 27, 2012, by and among the Company and the several purchasers signatory thereto and (iii) the Rights Agreement, the Company has not granted or agreed to grant to any Person any rights (including "piggy-back" registration rights) to have any securities of the Company registered with the SEC or any other governmental authority that have not been satisfied or waived.

3.41. Application of Takeover Protections. There is no control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's charter documents or the laws of its state of incorporation that is or could become applicable to the Purchaser as a result of the Purchaser and the Company fulfilling their obligations or exercising their rights under the Transaction Agreements, including, without limitation, as a result of the Company's issuance of the Securities (including the issuance of the Underlying Securities upon conversion thereof) and the Purchaser's ownership of the Securities.

3.42. Disclosure. The Company understands and confirms that the Purchaser will rely on the foregoing representations in effecting transactions in the Securities. All disclosure furnished by or on behalf of the Company to the Purchaser in connection with this Agreement, the Second Amendment and the Master Framework Agreement regarding the Company, its business and the transactions contemplated hereby and thereby is true and correct in all material respects and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

ARTICLE 4
REPRESENTATIONS AND WARRANTIES OF THE PURCHASER

The Purchaser represents, warrants and covenants to the Company with respect to this purchase as follows:

4.1. Organization. The Purchaser is duly organized, validly existing, and in good standing under the laws of the jurisdiction of its organization.

4.2. Power. The Purchaser has all requisite power to execute and deliver this Agreement and to carry out and perform its obligations under the terms of this Agreement.

4.3. Authorization. The execution, delivery, and performance of this Agreement by the Purchaser has been duly authorized by all requisite action, and this Agreement constitutes the legal, valid, and binding obligation of the Purchaser enforceable in accordance with its terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally, and (b) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.4. Consents and Approvals. The Purchaser need not give any notice to, make any filing with, or obtain any authorization, consent, or approval of any government or governmental agency in order to consummate the transactions contemplated by this Agreement.

4.5. Non-Contravention. Neither the execution and the delivery of this Agreement, nor the consummation of the transactions contemplated hereby, will violate in any material respect any constitution, statute, regulation, rule, injunction, judgment, order, decree, ruling, charge, or other restriction of any government, governmental agency, or court to which the Purchaser is subject. No approval, waiver, or consent by the Purchaser under any instrument, contract, or agreement to which the Purchaser or any of its Affiliates is a party is necessary to consummate the transactions contemplated hereby.

4.6. Purchase for Investment Only. The Purchaser is purchasing the Securities for the Purchaser's own account for investment purposes only and not with a view to, or for resale in connection with, any "distribution" in violation of the Securities Act. By executing this Agreement, the Purchaser further represents that it does not have any contract, undertaking, agreement, or arrangement with any Person to sell, transfer, or grant participation to such Person or to any third Person, with respect to any of the Securities. The Purchaser understands that the Securities have not been registered under the Securities Act or any applicable state securities laws by reason of a specific exemption therefrom that depends upon, among other things, the bona fide nature of the investment intent as expressed herein.

4.7. Disclosure of Information. The Purchaser has had an opportunity to review the Company's filings under the Securities Act and the Exchange Act (including risks factors set forth therein) and the Purchaser represents that it has had an opportunity to ask questions and receive answers from the Company to evaluate the financial risk inherent in making an investment in the Securities. To the Purchaser's knowledge, the Purchaser has not been offered the opportunity to purchase the Securities by means of any general solicitation or general advertising.

4.8. Risk of Investment. The Purchaser realizes that the purchase of the Securities will be a highly speculative investment and the Purchaser may suffer a complete loss of its investment. The Purchaser understands all of the risks related to the purchase of the Securities. By virtue of the Purchaser's experience in evaluating and investing in private placement transactions of securities in companies similar to the Company, the Purchaser is capable of evaluating the merits and risks of the Purchaser's investment in the Company and has the capacity to protect the Purchaser's own interests.

4.9. Advisors. The Purchaser has reviewed with its own tax advisors the federal, state, and local tax consequences of this investment and the transactions contemplated by this Agreement. The Purchaser acknowledges that it has had the opportunity to review the Transaction Agreements and the transactions contemplated thereby with the Purchaser's own legal counsel.

4.10. Finder. The Purchaser is not obligated and will not be obligated to pay any broker commission, finders' fee, success fee, or commission in connection with the transactions contemplated by this Agreement.

4.11. Restricted Securities. The Purchaser understands that the Securities must be held indefinitely unless subsequently registered under the Securities Act or unless an exemption from registration is otherwise available. Moreover, the Purchaser understands that except as set forth in the Rights Agreement, the Company is under no obligation to register the Securities. The Purchaser is aware of Rule 144 promulgated under the Securities Act that permits limited resales of securities purchased in a private placement subject to the satisfaction of certain conditions.

4.12. Legend. It is understood by the Purchaser that the Security and any other document representing or evidencing the Securities shall be endorsed with a legend substantially in the following form:

> THE SECURITIES REPRESENTED BY THIS NOTE AND THE SECURITIES ISSUABLE UPON ITS CONVERSION HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR SECURITIES LAWS OF ANY STATE AND MAY NOT BE OFFERED, SOLD, ASSIGNED, PLEDGED TRANSFERRED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS OR PURSUANT TO AN AVAILABLE EXEMPTION FROM REGISTRATION UNDER THE ACT OR SUCH LAWS AND, IF REASONABLY REQUESTED BY THE COMPANY, UPON DELIVERY OF AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT THE PROPOSED TRANSFER IS EXEMPT FROM THE ACT OR SUCH LAWS. THIS NOTE IS ALSO SUBJECT TO THE TRANSFER RESTRICTIONS CONTAINED IN THE SECURITIES PURCHASE AGREEMENT, DATED AS OF JULY 30, 2012, AMONG THE COMPANY AND TOTAL GAS & POWER USA, SAS.

Subject to Section 8.3, the Company need not register a transfer of Securities unless the conditions specified in the foregoing legend are satisfied. Subject to Section 8.3, the Company may also instruct its transfer agent not to register the transfer of any of the Securities unless the conditions specified in the foregoing legend are satisfied.

4.13. Investor Qualification. The Purchaser is an "accredited investor" as defined in Rule 501(a) of Regulation D under the Securities Act.

ARTICLE 5
CONDITIONS TO COMPANY'S OBLIGATIONS AT EACH CLOSING.

5.1. Conditions to Company's Obligations at the Initial Closing. The Company's obligation to complete the sale and issuance of the Securities and deliver the Securities to the Purchaser at the Initial Closing shall be subject to the following conditions to the extent not waived by the Company:

(a) Receipt of Payment. The Company shall have received payment, by wire transfer of immediately available funds, in the full amount of the portion of the Initial Closing Purchase Price to be paid in the first installment under the Initial Closing pursuant hereto for the Security to be purchased by and sold to the Purchaser in the first installment under the Initial Closing, less the amount to be retained by the Purchaser pursuant to Section 8.4.

(b) Representations and Warranties. The representations and warranties made by the Purchaser in Section 4 hereof shall be true and correct in all material respects as of, and as if made on, the date of this Agreement and as of the Initial Closing.

(c) Receipt of Rights Agreement. The Purchaser shall have executed and delivered to the Company the Rights Agreement, duly executed by the Purchaser.

(d) Receipt of Second Amendment. The Purchaser shall have executed and delivered to the Company the Second Amendment, duly executed by the Purchaser.

(e) Receipt of Master Framework Agreement. The Purchaser shall have executed and delivered to the Company the Master Framework Agreement, duly executed by the Purchaser.

5.2. Conditions to Company's Obligations at Each Subsequent Closing. The Company's obligation to complete the sale and issuance of the Securities and deliver the Securities to the Purchaser at each Subsequent Closing shall be subject to the following conditions to the extent not waived by the Company:

> (a) Receipt of Payment. The Company shall have received payment, by wire transfer of immediately available funds, in the full amount of the portion of the applicable Purchase Price to be paid in the first installment under the applicable Subsequent Closing pursuant hereto for the Security to be purchased by and sold to the Purchaser in the first installment under such applicable Subsequent Closing.

(b) Representations and Warranties. The representations and warranties made by the Purchaser in Section 4 hereof shall be true and correct in all material respects as of, and as if made as of, the applicable Subsequent Closing.

(c) Absence of No-Go Decision. A "No-Go Decision" under the Master Framework Agreement shall not have been made in accordance with the Master Framework Agreement.

ARTICLE 6
CONDITIONS TO PURCHASER'S OBLIGATIONS AT EACH CLOSING

6.1. Conditions to the Purchaser's Obligations at the Initial Closing. The Purchaser's obligation to accept delivery of the Securities and to pay for the Securities at the Initial Closing shall be subject to the following conditions to the extent not waived by the Purchaser:

(a) Representations and Warranties. The representations and warranties made by the Company in Section 3 hereof shall be true and correct in all respects as of, and as if made on, the date of this Agreement and as of the Initial Closing.

(b) Receipt of Securities. The Company shall have executed and delivered to the Purchaser the Securities to be purchased by and sold to the Purchaser in the first installment under the Initial Closing as described herein, duly executed by the Company.

(c) Receipt of Rights Agreement. The Company shall have executed and delivered to the Purchaser the Rights Agreement, duly executed by the Company.

(d) Receipt of Second Amendment. The Company shall have executed and delivered to the Purchaser the Second Amendment, duly executed by the Company.

(e) Receipt of Master Framework Agreement. The Company shall have executed and delivered to the Purchaser the Master Framework Agreement, duly executed by the Company.

(f) Legal Opinion. The Purchaser shall have received an opinion of Shearman & Sterling LLP, counsel to the Company, substantially in the form set forth in Exhibit C hereto.

(g) Certificate. The Purchaser shall have received a certificate signed by the Company's Chief Executive Officer and Chief Financial Officer to the effect that the representations and warranties of the Company in Section 3 hereof are true and correct in all respects as of, and as if made on, the date of this Agreement and as of the Initial Closing and that the Company has satisfied in all material respects all of the conditions set forth in this Agreement with respect to the Initial Closing.

(h) Good Standing. The Company is validly existing as a corporation in good standing under the laws of Delaware as evidenced by a certificate of the Secretary of State of the State of Delaware, a copy of which was provided to the Purchaser.

(i) Secretary's Certificate. A certificate, executed by the Secretary of the Company and dated as of the Initial Closing Date, as to (A) the resolutions approving the issuance of the Securities (including the issuance of the Underlying Securities upon conversion thereof) as adopted by an Independent Committee of the Board of Directors and/or the Company's Board of Directors in a form reasonably acceptable to the Purchaser, (B) the certificate of incorporation, and (C) the bylaws, each as in effect as of the Initial Closing Date.

(j) Board Approval. The terms and conditions of the issuance of the Securities (including the issuance of the Underlying Securities upon conversion thereof) and the Transaction Agreements shall have been approved by an Independent Committee of the Board of Directors and/or a majority of the disinterested directors of the Board of Directors, as applicable.

(k) Approvals. The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, and given all notices, if any, necessary for the sale of the Securities, including, without limitation, from the NASDAQ Global Select Market.

6.2. Conditions to The Purchaser's Obligations at each Subsequent Closing. The Purchaser's obligation to accept delivery of the Securities and to pay for the Securities at any Subsequent Closing shall be subject to the following conditions to the extent not waived by the Purchaser:

(a) Representations and Warranties. The representations and warranties made by the Company in Section 3 hereof shall be true and correct in all material respects as of, and as if made as of, each applicable Subsequent Closing.

(b) Receipt of Securities. The Company shall have executed and delivered to the Purchaser the Securities to be purchased by and sold to the Purchaser in the first installment under the applicable Subsequent Closing as described herein, duly executed by the Company.

(c) Legal Opinion. The Purchaser shall have received an opinion of Shearman & Sterling LLP, counsel to the Company, substantially in the form set forth in Exhibit C hereto.

(d) Certificate. The Purchaser shall have received a certificate signed by the Company's Chief Executive Officer and Chief Financial Officer to the effect that the representations and warranties of the Company referred to in Section 6.2(a) hereof are true and correct in all material respects as of, and as if made as of each applicable Subsequent Closing and that the Company has satisfied in all material respects all of the conditions set forth in this Agreement with respect to each applicable Subsequent Closing.

(e) Good Standing. The Company is validly existing as a corporation in good standing under the laws of Delaware as evidenced by a certificate of the Secretary of State of the State of Delaware, a copy of which was provided to the Purchaser.

(f) Secretary's Certificate. A certificate, executed by the Secretary of the Company and dated as of any Subsequent Closing Date, as to (A) the certificate of incorporation, and (B) the bylaws, each as in effect as of any Subsequent Closing Date.

(g) Approvals. The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, and given all notices, if any, necessary for the sale of the Securities, including, without limitation, from the NASDAQ Global Select Market.

(h) Absence of No-Go Decision. A "No-Go Decision" under the Master Framework Agreement shall not have been made in accordance with the Master Framework Agreement.

In the event the Initial Closing shall have occurred, the Company shall be irrevocably committed to issue and sell to the Purchaser, and the Purchaser shall be irrevocably committed to purchase from the Company, the Securities to be issued, sold and purchased in the second installment of the Initial Closing with no additional conditions except that (i) the following representations and warranties made by the Company shall be true and correct in all material respects as of, and if as made as of, the second installment of the Initial Closing: 3.1 (organization and standing); 3.3 (power); 3.4 (authorization); 3.5 (consents and approvals); 3.6 (non-contravention); 3.7 (the securities); 3.8 (the underlying securities); 3.9 (no registration); 3.14(b) (no violations under the Securities); 3.16 (listing compliance); 3.23 (solvency) (assuming for this purpose that the payment to be made in the second installment of the Initial Closing was instead made concurrent with the Initial Closing); 3.28 (investment company); 3.37 (integration; other issuances of securities); 3.38 (no general solicitation) (the "Installment Representations and Warranties"); (ii) the Purchaser shall have received a certificate signed by the Company's Chief Executive Officer and Chief Financial Officer to the effect that the Installment Representations and Warranties are true and correct in all material respects as of, and as if made as of, the second installment of the Initial Closing and that the Company has satisfied in all material respects all of the conditions set forth in this Agreement with respect to the second installment of the Initial Closing; and (iii) the Purchaser shall have received an opinion of Shearman & Sterling LLP, counsel to the Company, substantially in the form set forth in Exhibit C hereto. In the event the Third Closing shall have occurred, the Company shall be irrevocably committed to issue and sell to the Purchaser, and the Purchaser shall be irrevocably committed to purchase from the Company, the Securities to be issued, sold and purchased in the second installment of the Third Closing with no additional conditions except that (i) the Installment Representations and Warranties by the Company shall be true and correct in all material respects as of, and if as made as of, the second installment of the Third

Closing (assuming for this purpose that, in the case of the representations and warranties made by the Company in Section 3.23 (solvency), the payment to be made in the second installment of the Third Closing was instead made concurrent with the Third Closing); (ii) the Purchaser shall have received a certificate signed by the Company's Chief Executive Officer and Chief Financial Officer to the effect that the Installment Representations and Warranties are true and correct in all material respects as of, and as if made as of, the second installment of the Third Closing and that the Company has satisfied in all material respects all of the conditions set forth in this Agreement with respect to the second installment of the Third Closing; and (iii) the Purchaser shall have received an opinion of Shearman & Sterling LLP, counsel to the Company, substantially in the form set forth in Exhibit C hereto.

ARTICLE 7
COVENANTS OF THE COMPANY

7.1. Payment of Principal and Interest. The Company covenants and agrees that it will duly and punctually pay the principal of and interest (including any additional interest upon an Event of Default or a Make-Whole Interest (as defined in the Securities) on the Securities in accordance with the terms of such Securities.

7.2. Stay, Extension and Usury Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of the Securities; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law.

7.3. Corporate Existence. Subject to Section 7 of the Securities, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence in accordance with its organizational documents and the rights (charter and statutory), licenses and franchises of the Company; provided, however, that the Company shall not be required to preserve any such right, license or franchise if the Board of Directors of the Company shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and that the loss thereof is not adverse in any material respect to the Purchaser.

7.4. Taxes. The Company shall pay prior to delinquency all taxes, assessments and governmental levies, except as contested in good faith and by appropriate proceedings.

ARTICLE 8
OTHER AGREEMENTS OF THE PARTIES

8.1. Securities Laws Disclosure; Publicity. The initial press release regarding the transactions contemplated by the Transaction Agreements shall be a joint press release by the Company and the Purchaser and the text of such press release shall be agreed upon by the Company and the Purchaser. On or before 5:30 p.m., New York City time, on the fourth Business Day immediately following the execution of this Agreement, the Company will file a Current Report on Form 8-K with the SEC describing the terms of the Transaction Agreements. The Company and the Purchaser will maintain the confidentiality of all disclosures made to it in connection with this transaction (including, until such time as the transactions contemplated by the Transaction Agreements are required to be publicly disclosed by the Company as described in this Section 8.1, the existence and terms of this transaction).

8.2. Form D. The Company agrees to timely file a Form D with respect to the Securities sold at each Closing as required under Regulation D and to provide a copy thereof to the Purchaser (provided that the posting of the Form D on the SEC's EDGAR system shall be deemed delivery of the Form D for purposes of this Agreement).

8.3. Transfer Restrictions.

8.3.1 General. The Purchaser shall not, and shall not permit any of its Affiliates to, directly or indirectly, make, effect or otherwise consummate any Transfer of any Securities except in accordance with the terms and conditions of this Section 8.3. As used herein, "Transfer" means, directly or indirectly, to offer, sell (including any short sale), transfer, assign, pledge, encumber, hypothecate or similarly dispose of (by merger, testamentary disposition, operation of law or otherwise), either voluntarily or involuntarily, or enter into any contract, option or other arrangement or understanding with respect to the offer, sale (including any short sale), transfer, assignment, pledge, encumbrance, hypothecation or similar disposition of (by merger, testamentary disposition, operation of law or otherwise), any Securities "beneficially owned" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act) by a Person or any interest (including any right to all or any portion of the pecuniary interest in the security, including, without limitation, the right to receive interest, dividends and distributions, proceeds upon liquidation and receive the proceeds of disposition or conversion of the Securities. Whether or not treated as an offer or sale of the Securities under the Securities Act, "Transfer" shall also include any hedging or other transaction entered into after the date hereof, such as any purchase, sale (including any short sale) or grant of any right (including without limitation any put or call option) with respect to any of the Securities or with respect to any security that includes or derives any significant part of its value from such Securities. This Section 8.3 shall not be applicable to any of the Underlying Securities issued upon the conversion of any of the Securities in accordance with their terms following any such conversion.

8.3.2 Recognition of Transfer. No Transfer of any Securities that is in violation of this Section 8.3 shall be valid or effective, and the Company shall have no obligation to recognize such invalid Transfer. The Company shall not incur any liability as a result of refusing to make any payments of any kind in respect of the Securities to the transferee of any such invalid Transfer.

8.3.3 Permitted Transferees. Notwithstanding the restrictions in this Section 8.3, but subject to Section 8.3.1 and Section 8.3.2, the Purchaser shall be permitted to Transfer all or any portion of its Securities to an Affiliate (a "Permitted Transferee"); *provided, however,* that (a) such Affiliate shall execute a statement in writing and reasonably acceptable to the Company whereby such Affiliate expressly agrees to become a party to this Agreement and the other Transaction Agreements, and (b) if such Affiliate ceases at any time after any such Transfer to be an Affiliate of the Purchaser, all Securities previously Transferred to such Affiliate shall be required to be promptly Transferred back to the Purchaser. No Transfer of Securities to a Permitted Transferee shall release the Purchaser from liability for the obligations of the Purchaser and its Permitted Transferee pursuant to this Agreement and the other Transaction Agreements.

8.4. Use of Proceeds. The Company agrees to use $23,300,000 of the proceeds of the offering to be received by the Company in the first installment of the Initial Closing to immediately repay the Purchaser (which amount may be retained by the Purchaser and applied to such repayment) for research and development funding provided by the Purchaser pursuant to the Renewable Diesel Development Project Plan under the Current Collaboration Agreement. The Company agrees to use the remainder of the proceeds of the offering to fund activities under the Biofene Development Project Plan under the Collaboration Agreement as amended by the Second Amendment. The Company shall not use the proceeds of the offering in a manner that would require the Company to register as an investment company under the Investment Company Act of 1940, as amended.

8.5. Subsequent Securities Sales. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities to the Purchaser, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

8.6. Listing; SEC Compliance.

(a) Listing. The Company shall promptly take any action required to maintain on each Security the listing of all of the Underlying Securities upon each national securities exchange and automated quotation system, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and shall maintain, so long as any other shares of Common Stock shall be so listed, such listing of the Underlying Securities from time to time issuable under the terms of the Securities. The Company shall not take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock on The NASDAQ Stock Market.

(b) SEC Filings. The Company shall take all actions within its control to comply with the reporting requirements of the Exchange Act and each applicable national securities exchange and automated quotation system on which the Common Stock is listed. The Purchaser's sole remedy for breach of this Section 8.6(b) will be as set forth in Section 5 of the Securities.

(c) Current Information. The Company shall make and keep public information available, as those terms are understood and defined in SEC Rule 144 for so long as required in order to permit the resale of the Underlying Securities pursuant to SEC Rule 144.

8.7. Register. The Company shall keep a "register" which shall provide for the recordation of the name and address of, and the amount of each Security and the outstanding principal and interest on each Security owing to, the Purchaser. The entries in the register shall be conclusive evidence of the amounts due and owing to the Purchaser in the absence of manifest error. The obligations of the Company to the Purchaser under the Securities (the "Obligations") are registered obligations and the right, title and interest of the Purchaser and its assignees in and to such Obligations shall be transferable only upon notation of such transfer in the register. This Section 8.7 shall be construed so that the Obligations are at all times maintained in "registered form" within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the Code and any related regulations (and any other relevant or successor provisions of the Code or such regulations). The register shall be available for inspection by the Purchaser from time to time upon reasonable prior notice.

8.8. Federal Income Tax Reporting. Notwithstanding anything to the contrary contained herein, each party hereto hereby acknowledges and agrees that for United States federal, state and local income tax purposes, the aggregate "issue price" of the Securities under Section 1273(b) of the Code shall equal $53,300,000, with respect to the Securities to be purchased and sold at the Initial Closing, $30,000,000, with respect to any Securities to be purchased and sold at any Second Closing, and $21,700,000, with respect to the Securities to be purchased and sold at any Third Closing. Each party hereto agrees to use the foregoing issue price for all income tax, financial accounting and regulatory purposes with respect to this transaction. Each party hereto further acknowledges and agrees that the Obligations shall be treated as debt for all tax and accounting purposes and no party shall take any position inconsistent therewith.

8.9. Remedies for Purchaser Funding Default. In the event that the Purchaser fails to make full payment for the Security to be purchased by and sold to the Purchaser in any applicable installment under any Subsequent Closing in accordance with the terms hereof by the applicable date such installment was due, and such failure continues for 5 days after the applicable date such installment was due, the unfunded amount shall bear interest at a rate per annum equal to 2.50%. In the event such failure continues for 30 days after the applicable date such installment was due, the unfunded amount shall then bear interest at a rate per annum equal to 15%. All computations of interest under this Section 8.9 shall be made on the basis of a 360-day year and actual days elapsed (which results in more interest being paid than if computed on the basis of a 365-day year). Such interest shall be paid monthly on each 1 month anniversary date of the applicable date such installment was due, and the Company shall be entitled to offset any such interest that is not paid when due against the principal amount of the Securities.

ARTICLE 9
MISCELLANEOUS

9.1. Survival. The representations, warranties and covenants contained herein shall survive the execution and delivery of this Agreement and the sale of the Securities.

9.2. Indemnification.

(a) Indemnification of Purchaser. The Company agrees to indemnify and hold harmless the Purchaser and its Affiliates and their respective directors, officers, trustees, members, managers, employees and agents, and their respective successors and assigns, from and against any and all losses, claims, damages, liabilities and expenses (including without limitation reasonable attorney fees and disbursements and other expenses reasonably incurred in connection with investigating, preparing or defending any action, claim or proceeding, pending or threatened and the costs of enforcement thereof) (collectively, "Losses") to which such Person may become subject as a result of any breach of representation, warranty, covenant or agreement made by or to be performed on the part of the Company under this Agreement, and will reimburse any such Person for all such amounts as they are incurred by such Person.

(b) Conduct of Indemnification Proceedings. Any Person entitled to indemnification hereunder shall (i) give prompt notice to the indemnifying party of any claim with respect to which it seeks indemnification and (ii) subject to the Company acknowledging in writing that such claim is an indemnifiable claim under this Agreement, permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided that any Person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such Person unless (a) the indemnifying party has agreed to pay such fees or expenses, or (b) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such Person or (c) in the reasonable judgment of any such Person, based upon written advice of its counsel, a conflict of interest exists between such Person and the indemnifying party with respect to such claims (in which case, if the Person notifies the indemnifying party in writing that such Person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such Person); and provided, further, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, which consent shall not be unreasonably withheld, conditioned or delayed, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. No indemnified party will, except with the consent of the indemnifying party, consent to entry of any judgment or enter into any settlement.

9.3. Assignment; Successors and Assigns. Except as contemplated by Section 8.3.3, this Agreement may not be assigned by either party without the prior written consent of the other party. This Agreement and all provisions thereof shall be binding upon, inure to the benefit of, and are enforceable by the parties hereto and their respective successors and permitted assigns.

9.4. Notices. All notices, requests, and other communications hereunder shall be in writing and will be deemed to have been duly given and received (a) when personally delivered, (b) when sent by facsimile upon confirmation of receipt, (c) one business day after the day on which the same has been delivered prepaid to a nationally recognized courier service, or (d) five business days after the deposit in the United States mail, registered or certified, return receipt requested, postage prepaid, in each case to the applicable address set forth below:

If to the Company, to:

Amyris, Inc.
5885 Hollis Street, Suite 100
Emeryville, CA 94608
United States of America
Attn: General Counsel
Fax. No.:

with a copy (which shall not constitute notice) to:

Shearman & Sterling LLP
Four Embarcadero Center, Suite 3800
San Francisco, CA 94111-5994
United States of America
Attn:
Fax. No.:

If to the Purchaser, to:

Total Gas & Power USA, SAS
2, place Jean Millier
La Défense 6
92400 Courbevoie
France
Attn:
Fax. No.:

with a copy (which shall not constitute notice) to:

Wilson Sonsini Goodrich & Rosati
Professional Corporation
650 Page Mill Road
Palo Alto, CA 94304
United States of America
Attn:
Fax No.:

Any party hereto from time to time may change its address, facsimile number, or other information for the purpose of notices to that party by giving notice specifying such change to the other parties hereto. The Purchaser and the Company may each agree in writing to accept notices and other communications to it hereunder by electronic communications pursuant to procedures reasonably approved by it; provided that approval of such procedures may be limited to particular notices or communications.

9.5. Governing Law; Jurisdiction.

(a) Governing Law. This Agreement, and the provisions, rights, obligations, and conditions set forth herein, and the legal relations between the parties hereto, including all disputes and claims, whether arising in contract, tort, or under statute, shall be governed by and construed in accordance with the laws of the State of New York without giving effect to its conflict of law provisions.

(b) Jurisdiction. Any and all disputes arising out of, or in connection with, the interpretation, performance, or nonperformance of this Agreement or any and all disputes arising out of, or in connection with, transactions in any way related to this Agreement and/or the relationship between the parties shall be litigated solely and exclusively before the United States District Court for the Southern District of New York. The parties consent to the in personam jurisdiction of said court for the purposes of any such litigation, and waive, fully and completely, any right to dismiss and/or transfer any action pursuant to 28 U.S.C. § 1404 or 1406 (or any successor statute). In the event the United States District Court for the Southern District of New York does not have subject matter jurisdiction of said matter, then such matter shall be litigated solely and exclusively before the appropriate state court of competent jurisdiction located in the state of New York.

9.6. Severability. In the event that any provision of this Agreement or the application of any provision hereof is declared to be illegal, invalid, or otherwise unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall not be affected except to the extent necessary to delete such illegal, invalid, or unenforceable provision unless that provision held invalid shall substantially impair the benefits of the remaining portions of this Agreement.

9.7. Headings. The headings in this Agreement are for convenience of reference only and shall not constitute a part of this Agreement, nor shall they affect its meaning, construction, or effect.

9.8. Entire Agreement. This Agreement embodies the entire understanding and agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to the subject matter hereof.

9.9. Finder's Fee. The Company agrees that it shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for Persons engaged by the Purchaser) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Purchaser harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any claim for any such fees or commissions.

9.10. Expenses. Each party will bear its own costs and expenses in connection with this Agreement.

9.11. Further Assurances. The parties agree to execute and deliver all such further documents, agreements and instruments and take such other and further action as may be necessary or appropriate to carry out the purposes and intent of this Agreement.

9.12. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other party. Facsimile signatures shall be deemed originals for all purposes hereunder.

[Signature page follows]

This Securities Purchase Agreement is hereby confirmed and accepted by the Company as of July 30, 2012.

AMYRIS, INC.

By:/s/ John Melo
Name: John Melo
Title: President and Chief Executive Officer

TOTAL GAS & POWER USA, SAS

By:/s/ Bernard Clément
Name: Bernard Clément
Title: Authorized Signatory

[Signature Page to Securities Purchase Agreement]

ANNEX B

FORM OF REMAINING NOTE

FORM OF SECURITY 1.5% SENIOR SECURED CONVERTIBLE NOTE

RS-_____________ [_________], 201[_]

U.S.$___________

THE SECURITIES REPRESENTED BY THIS NOTE AND THE SECURITIES ISSUABLE UPON ITS CONVERSION HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR SECURITIES LAWS OF ANY STATE AND MAY NOT BE OFFERED, SOLD, ASSIGNED, PLEDGED TRANSFERRED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS OR PURSUANT TO AN AVAILABLE EXEMPTION FROM REGISTRATION UNDER THE ACT OR SUCH LAWS AND, IF REASONABLY REQUESTED BY THE COMPANY, UPON DELIVERY OF AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT THE PROPOSED TRANSFER IS EXEMPT FROM THE ACT OR SUCH LAWS. THIS NOTE IS ALSO SUBJECT TO THE TRANSFER RESTRICTIONS CONTAINED IN THE SECURITIES PURCHASE AGREEMENT, DATED AS OF JULY 30, 2012, AMONG THE COMPANY AND TOTAL ENERGIES NOUVELLES ACTIVITÉS USA (FORMERLY KNOWN AS TOTAL GAS & POWER USA, SAS).

FOR VALUE RECEIVED, the undersigned, Amyris, Inc., a Delaware corporation (the "***Company***"), promises to pay to Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS), a *société par actions simplifiée* organized under the laws of the Republic of France, or its Permitted Transferees pursuant to Section 13 of this Note (the "***Investor***"), in lawful money of the United States and in immediately available funds (or in shares of Common Stock as provided herein), U.S. $[______] (the "***Face Amount***"), all in accordance with the provisions of this Note. The "***Issue Date***" of this Note is [_________], 201[_].

This Note was issued pursuant to the Securities Purchase Agreement, dated as of July 30, 2012 (as amended from time to time, the "***Agreement***"), among the Company and the Investor. Unless the context otherwise requires, as used herein, "***Note***" means any of the Convertible Notes issued to the Investor pursuant to the Agreement and any other similar convertible notes issued by the Company in exchange for, or to effect a transfer of, any Note and "***Notes***" means all such Notes in the aggregate. This Note is issued in exchange for Note R-[_] originally issued on [____], 201[_] (the "***Original Issue Date***") pursuant to the Agreement (the "***Exchanged Note***").

The Company's liabilities, obligations and indebtedness to the Investor for monetary amounts, whether now or hereafter owing, arising, due or payable under this Note (collectively, the "***Obligations***"), are secured by a lien on all of the Company's right, title and interests in and to the Company's shares in the capital of Total Amyris BioSolutions B.V., a private company with limited liability organized under the laws of the Netherlands (*besloten vennootschap met beperkte aansprakelijkheid*) ("***JVCO***"), as well as certain additional collateral pursuant to a pledge agreement executed as a notarial deed as of as of December 2, 2013 before B.J. Kuck, civil law notary in Amsterdam, the Netherlands, or his deputy, by the Company in favor of the Investor, and in the presence of and acknowledged by JVCO, as amended from time to time.

1. Definitions. For purposes of this Note, the following definitions shall be applicable:

"***Affiliate***" of any specified person means any other person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified person; for purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to any person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such person, whether through the ownership of voting securities, by agreement or otherwise.

"***Amyris License Agreement***" has the meaning ascribed thereto in the Shareholders Agreement.

"***Bankruptcy Law***" means Title 11, U.S. Code or any similar federal or state law for the relief of debtors.

"***Board of Directors***" means the board of directors of the Company.

"***Business Day***" means any day other than a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"***Capital Lease Obligation***" means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at such time be required to be capitalized on a balance sheet in accordance with GAAP.

"***Certificate of Incorporation***" means the Company's Restated Certificate of Incorporation, as amended and as in effect on the date hereof.

"***Change of Control***" shall mean the occurrence of any of the following: (i) the consolidation of the Company with, or the merger of the Company with or into, another "person" (as such term is used in Rule 13d-3 and Rule 13d-5 of the Exchange Act), or the sale, lease, transfer, conveyance or other disposition, in one or a series of related transactions, of all or substantially all of the assets of the Company and its Subsidiaries taken as a whole, or the consolidation of another "person" with, or the merger of another "person" into, the Company, other than in each case pursuant to a transaction in which the "persons" that "beneficially owned" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act), directly or indirectly, the Voting Shares of the Company immediately prior to the transaction "beneficially own", directly or indirectly, Voting Shares representing at least a majority of the total voting power of all outstanding classes of voting stock of the surviving or transferee person; (ii) the adoption by the Company of a plan relating to the liquidation or dissolution of the Company; (iii) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any "person" becomes the "beneficial owner" directly or indirectly, of more than 50% of the Voting Shares of the Company (measured by voting power rather than number of shares); or (iv) the first day on which a majority of the members of the Board of Directors does not consist of Continuing Directors.

"***Class A Note***" has the meaning ascribed thereto in the Shareholders Agreement.

"***Closing Price***" of the shares of Common Stock on any day means the last reported sale price regular way on such day or, in the case no such sale takes place on such day, the average of the reported closing bid and asked prices regular way of the shares of Common Stock, in each case as quoted on The NASDAQ Stock Market or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

"***Common Stock***" means the Company's common stock, $0.0001 par value per share (or such other security into which such Common Stock is exchanged for (or becomes) pursuant to the consummation of a Capital Reorganization (as defined in Section 3(g))).

"***Continuing Director***" shall mean, as of any date of determination, any member of the Board of Directors who (i) was a member of the Board of Directors on July 31, 2012 or (ii) was nominated for election or elected to the Board of Directors with the approval of a majority of the Continuing Directors who were members of the Board of Directors at the time of such nomination or election and who voted with respect to such nomination or election; provided that a majority of the members of the Board of Directors voting with respect thereto shall at the time have been Continuing Directors.

"***Debt***" shall mean, with respect to any person, any indebtedness of such person, whether or not contingent, in respect of borrowed money or evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof) or banker's acceptances or representing Capital Lease Obligations or the balance deferred and unpaid of the purchase price of any property or representing any Hedging Obligations, except any such balance that constitutes an accrued expense or trade payable, if and to the extent any of the foregoing indebtedness (other than letters of credit and Hedging Obligations) would appear as a liability upon a balance sheet of such Person prepared in accordance with GAAP, as well as all Debt of others secured by a Lien on any asset of such Person (whether or not such

Debt is assumed by such Person) and Lease Debt and, to the extent not otherwise included, the Guarantee by such Person of any Debt of any other Person. The indebtedness of the Company represented by this Note shall constitute Debt. The amount of any Debt outstanding as of any date shall be (i) the accreted value thereof, in the case of any Debt that does not require current payments of interest or (ii) the principal amount thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Debt.

"***Default***" means any event that is or with the passage of time or the giving of notice or both would be an Event of Default.

"***Disqualified Stock***" means any capital stock that, by its terms (or by the terms of any security into which it is convertible, or for which it is exchangeable, in each case, at the option of the holder of the capital stock), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the holder of the capital stock, in whole or in part, on or prior to the date that is 91 days after the date on which this Note matures. The amount of Disqualified Stock deemed to be outstanding at any time will be the maximum amount that the Company and its Subsidiaries may become obligated to pay upon the maturity of, or pursuant to any mandatory redemption provisions of, such Disqualified Stock, exclusive of accrued dividends.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

"***Final Go Decision Date***" has the meaning ascribed thereto in the Shareholders Agreement.

"***GAAP***" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession in the United States, which are in effect from time to time.

"***Guarantee***" means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including, without limitation, by way of a pledge of assets, letters of credit and reimbursement agreements in respect thereof), of all or any part of any Debt.

"***Hedging Obligations***" means, with respect to any person, the obligations of such person under (i) currency exchange or interest rate swap agreements, interest rate cap agreements and interest rate collar agreements and (ii) other agreements or arrangements designed to protect such person against fluctuations in interest rates or currency exchange rates.

"***Intellectual Property***" has the meaning ascribed thereto in the Agreement.

"***Jet Go Decision***" has the meaning ascribed thereto in the Master Framework Agreement.

"***Larger Shareholder***" shall mean any "person" or "group" (as each such term is used in Rule 13d-3 and Rule 13d-5 of the Exchange Act) who shall "beneficially own" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act), directly or indirectly, Voting Shares of the Company (measured by voting power rather than number of shares) representing a larger number of Voting Shares than the number of Voting Shares of the Company (measured by voting power rather than number of shares) "beneficially owned", directly or indirectly, by the Investor and its Affiliates, in each case as reported on (or required to have been reported on to the extent any "executive officer" (as such term is defined in Rule 3b-7 under the Exchange Act) of the Company has actual knowledge of the number of such "person" or "group's" Voting Shares) the most recent Schedule 13D or Schedule 13G or an amendment to any such Schedule filed with the Securities and Exchange Commission by any such "person" or "group" or by the Investor or any of its Affiliates or as otherwise publicly announced by any such "person" or "group" or by the Investor or any of its Affiliates.

"***Lease Debt***" means, with respect to any Person, (i) the amount of any accrued and unpaid obligations of such Person arising under any lease or related document (including a purchase agreement, conditional sale or other title retention agreement) in connection with the lease of real property or improvement thereon (or any personal property included as part of any such lease) which provides that such Person is contractually obligated to purchase or cause a third party to purchase the leased property or pay an agreed upon residual value of the leased property to the lessor (whether or not such lease transaction is characterized as an operating lease or a capitalized lease in accordance with GAAP) and (ii) the guarantee, direct or indirect, in any manner (including, without limitation, letters of credit and reimbursement agreements in respect thereof), of any of the amounts set forth in (i) above.

"***Lien***" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law (including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction). Notwithstanding the foregoing, (x) prior to either the No-Go Decision Date or the Final Go Decision Date, a license to any Intellectual Property for uses other than those set forth in the scope of the Amyris License Agreement shall not constitute a Lien hereunder, (y) following the No-Go Decision Date with respect to a particular JV Product or JV Products, a license to any Intellectual Property with respect to such JV Product or JV Products shall not constitute a Lien hereunder, and (z) following the Final Go Decision Date with respect to a particular JV Product or JV Products, a license to any Intellectual Property with respect to such JV Product or JV Products for uses other than those set forth in the scope of the Amyris License Agreement, shall not constitute a Lien hereunder.

"***Master Framework Agreement***" shall have the meaning specified in the Agreement.

"***No-Go Decision Date***" has the meaning ascribed thereto in the Master Framework Agreement.

"***Permitted Transferees***" shall mean any Affiliate of Total Energies Nouvelles Activités USA.

"***Person***" means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"***Registration Rights Agreement***" means that certain Registration Rights Agreement, dated July 30, 2012, by and among the Company and the Investor.

"***Securities Act***" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"***Shareholders Agreement***" means the Shareholders' Agreement dated as of December 2, 2013, by and among the Company, the Investor and JVCO.

"***Significant Subsidiary***" means any Subsidiary of the Company that would be a "significant subsidiary" within the meaning specified in Rule 1-02(w) of Regulation S-X promulgated by the Commission under the Exchange Act.

"***Subsidiary***" means, with respect to any specified Person:

(1) any corporation, association or other business entity of which more than 50% of the total voting power of shares of capital stock entitled (without regard to the occurrence of any contingency and after giving effect to any voting agreement or stockholders' agreement that effectively transfers voting power) to vote in the election of directors, managers or trustees of the corporation, association or other business entity is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and

(2) any partnership (a) the sole general partner or the managing general partner of which is such Person or a Subsidiary of such Person or (b) the only general partners of which are that Person or one or more Subsidiaries of that Person (or any combination thereof).

"***Trading Day***" means, with respect to the Common Stock, each Monday, Tuesday, Wednesday, Thursday and Friday, other than any day on which securities are not generally traded on The NASDAQ Stock Market (or its successor) or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

"*Transfer*" means, directly or indirectly, to offer, sell (including any short sale), transfer, assign, pledge, encumber, hypothecate or similarly dispose of (by merger, testamentary disposition, operation of law or otherwise), either voluntarily or involuntarily, or enter into any contract, option or other arrangement or understanding with respect to the offer, sale (including any short sale), transfer, assignment, pledge, encumbrance, hypothecation or similar disposition of (by merger, testamentary disposition, operation of law or otherwise), any Conversion Shares "beneficially owned" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act) by a Person or any interest (including any right to (x) all or any portion of the pecuniary interest in the security, including, without limitation, the right to receive dividends and distributions, proceeds upon liquidation and receive the proceeds of disposition or conversion (if applicable) of the security, or (y) direct the voting of the security with respect to any matter for which the security is entitled to vote) in any Conversion Shares beneficially owned by a Person. Whether or not treated as an offer or sale of the Conversion Shares under the Securities Act, "*Transfer*" shall also include any hedging or other transaction entered into after the date hereof, such as any purchase, sale (including any short sale) or grant of any right (including without limitation any put or call option) with respect to any of the Conversion Shares or with respect to any security that includes or derives any significant part of its value from such Conversion Shares.

"*Voting Shares*" of any person means capital shares or capital stock of such Person which ordinarily has voting power for the election of directors (or persons performing similar functions) of such person, whether at all times or only so long as no senior class of securities has such voting power by reason of any contingency.

2. Interest; Payment of Principal of Note; Cancellation of Note.

(a) **Interest.** This Note shall bear interest from the Issue Date on the Face Amount at a rate per annum equal to 1.50% (subject to Section 5(c)), it being understood and agreed that $[______] in accrued and unpaid interest under the Exchanged Note as of the Issue Date is deemed to have accrued and is outstanding under this Note. Interest on this Note shall accrue daily and be due and payable in arrears on the Final Maturity Date and at such other times as may be specified herein. All computations of interest shall be made on the basis of a 360-day year and actual days elapsed (which results in more interest being paid than if computed on the basis of a 365-day year). Notwithstanding the foregoing, if an Event of Default shall have occurred and be continuing this Note shall bear interest on the Face Amount at a rate per annum equal to 2.50% (as may be further adjusted pursuant to Section 5(c)).

(b) **Scheduled Payment of Principal.** Unless paid, converted or cancelled and extinguished earlier in accordance with the terms hereof, the Company shall deliver to the Investor cash in the amount of the Face Amount, together with all accrued and unpaid interest on this Note, on March 1, 2017 (the "***Final Maturity Date***").

(c) **Final Go Decision Date After a Go Decision.** Promptly following the occurrence of the Final Go Decision Date after a Go Decision, and concurrently with the execution and delivery of the Final Shareholders' Agreement, the Company will repurchase this Note from the Investor at a price equal to 100% of the Face Amount of this Note, plus any accrued and unpaid interest thereon as of the date of the execution and delivery of the Final Shareholders' Agreement.

(d) **Final Go Decision Date After a Jet Go Decision.** Promptly following the occurrence of the Final Go Decision Date after a Jet Go Decision, and concurrently with the execution and delivery of the Final Shareholders' Agreement, (i) the Company will repurchase from the Investor 30% of the Debt represented by the Face Amount of this Note at a price equal to 30% of the Face Amount of this Note, plus any accrued and unpaid interest on this Note as of the date of the execution and delivery of the Final Shareholders' Agreement and (ii) upon receipt of this Note from the Investor, the Company shall concurrently issue and deliver to the Investor a new Note in an aggregate principal amount equal to 70% of the Debt represented by the Face Amount.

3. Conversion Rights; Adjustments. The Investor shall have conversion rights as follows (the "***Conversion Rights***"):

(a) **Investor's Right to Convert.** At any time (i) after the tenth Trading Day prior to the Final Maturity Date and prior to the fifth Trading Day prior to the Final Maturity Date, (ii) after the earlier to occur of (x) the occurrence of a Change of Control and (y) the date of the Company's delivery of the

Change of Control Notice pursuant to Section 4(b), and in each case and prior to the fifth Trading Day prior to the Final Maturity Date, (iii) when there shall then exist a Larger Shareholder after the No-Go Decision Date, or (iv) after the occurrence of an Event of Default, the Investor shall have the right to convert the Face Amount of this Note, in whole or in part, at the option of the Investor, at any time within the period specified above into a number of fully paid and nonassessable authorized but unissued Common Stock determined by dividing (x) the Face Amount proposed to be converted at such date by (y) the then effective Conversion Price on the Conversion Date (as defined in Section 3(c)(i)) (the "***Investor Optional Conversion***").

(b) The "Conversion Price" at which Common Stock shall be deliverable upon conversion of the Notes (the "***Conversion Price***") shall initially be $4.11. Such initial Conversion Price shall be subject to adjustment as provided below.

(c) **Mechanics of Conversion.**

(i) In order to exercise its rights pursuant to the Investor Optional Conversion, the Investor shall deliver written notice in the form of Exhibit 1 to the Company stating that the Investor elects to convert all or part of the Face Amount represented by this Note. Such notice shall state the Face Amount of Notes which the Investor seeks to convert and shall be accompanied within one (1) Trading Day by the Note or Notes subject to conversion. The date contained in the notice (which date shall be no earlier than the Trading Day immediately following the date of the notice) shall be the date of conversion of the Note (such date of conversion, the "***Conversion Date***") and the Investor shall be deemed to be the beneficial owner of the underlying Common Stock as of such date.

(ii) The Investor shall be deemed to beneficially own the Common Stock underlying this Note as of the applicable Conversion Date. Not later than three (3) Trading Days following the Conversion Date, the Company shall promptly issue and deliver to the Investor a certificate or certificates for the number of shares of Common Stock to which the Investor is entitled and, in the case where only part of a Note is converted, the Company shall execute and deliver (at its own expense) a new Note of any authorized denomination as requested by the Investor in an aggregate principal amount equal to and in exchange for the unconverted portion of the principal amount of the Note so surrendered.

(iii) Upon conversion of this Note in whole or in part in accordance with the provision of Section 3(c) of this Note, the Company shall pay to the Investor, substantially concurrently with delivery of the shares of Common Stock issuable on such conversion (the "***Conversion Shares***"), any accrued and unpaid interest, through the day preceding the Conversion Date, on the portion of the Face Amount represented by this Note that has been so converted. In addition, upon conversion of this Note in whole or in part following a Change of Control the Company shall pay to the Investor, substantially concurrently with delivery of the Conversion Shares, an amount in cash equal to the interest that would have accrued at a rate per annum equal to 1.50% from such Conversion Date through the Final Maturity Date on the portion of the Face Amount represented by this Note that has been so converted if such Note (or portion of the Note) had not been converted ("***Make-Whole Interest***"). Notwithstanding the foregoing, in no event will the total amount of Make-Whole Interest exceed $[________].[(1)]

(iv) The Company shall at all times during which the Notes shall be outstanding, have and keep available out of its authorized but unissued shares, for the purpose of effecting the conversion of the outstanding Notes, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Notes. In no event shall the Conversion Price be reduced to an amount less than the then par value of the Common Stock.

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(1) Amount ("Make-Whole Interest Cap") for the Notes issued in exchange for Notes R-2, R-3, R-4 and R-5 is $7,487,479.13, $16,622,204.19, $974,025.97 and $1,948,051.95, respectively. The Make-Whole Interest Cap for the Notes to be issued in connection with the Third Closing to be equal to the conversion premium on the applicable Note, calculated by using the consolidated closing bid price of the shares of Common Stock as quoted on The NASDAQ Stock Market on July 30, 2012, the execution date of the Agreement, which was $3.54, and the Conversion Price. The aggregate of the Make-Whole Interest Caps on the $21,700,000 aggregate principal amount of Notes that may be issued at the Third Closing pursuant to the Agreement shall equal $10,831,886.48.

(v) No fractional shares of Common Stock shall be issued upon any conversion of the Notes pursuant to this Section 3. In lieu of fractional shares, the Company shall pay cash equal to such fraction multiplied by the Closing Price of the Common Stock on the Conversion Date.

(vi) All Notes (or the portions thereof) which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such Notes, except only the right of the Investor to receive shares of Common Stock in exchange therefor, accrued and unpaid interest and Make-Whole Interest, if applicable, each as described in Section 3(b)(iii) and, if applicable, cash for any fractional shares of Common Stock. Any Notes, to the extent so converted, shall be retired and canceled.

(vii) If any conversion pursuant to this Section 3 is in connection with an underwritten offering of securities registered pursuant to the Securities Act, the conversion may, at the option of the Investor, be conditioned upon the closing with the underwriter of the sale of the Conversion Shares issuable to the Investor pursuant to such offering, in which event the Investor shall not be deemed to have converted such Notes until immediately prior to the closing of such sale of securities.

(d) **Adjustment for Share Splits and Combinations.** If the Company shall at any time or from time to time after July 31, 2012 effect a subdivision of the outstanding shares of Common Stock, the Conversion Price and Conversion Price Floor (as defined in Section 3(e)) then in effect immediately before that subdivision shall be proportionately decreased. If the Company shall at any time or from time to time after July 31, 2012 combine the outstanding shares of Common Stock, the Conversion Price and Conversion Price Floor then in effect immediately before the combination shall be proportionately increased. Any adjustment under this paragraph shall become effective at the close of business on the date the subdivision or combination becomes effective.

(e) **Adjustment for Certain Dividends and Distributions.** In the event the Company at any time or from time to time after July 31, 2012, shall make or issue a dividend or other distribution payable in (x) additional shares of Common Stock, then and in each such event the Conversion Price shall be decreased as of the time of such issuance, by multiplying such Conversion Price by a fraction, the numerator of which shall be the total number of shares of Common Stock outstanding immediately prior to such issuance and the denominator of which shall be the total number of shares of Common Stock outstanding immediately prior to such issuance plus the number of such additional shares of Common Stock issuable in payment of such dividend or distribution; (y) in cash, then and in each such event, the Conversion Price shall be decreased as of the time of such issuance, by multiplying such Conversion Price by a fraction, the numerator of which shall be the Closing Price of the Common Stock on the Trading Day immediately preceding the ex-dividend date for such dividend and distribution minus the amount in cash per share of Common Stock that the Company dividends or distributes, and the denominator of which shall be the Closing Price of the Common Stock on the Trading Day immediately preceding the ex-dividend date for such dividend and distribution; (z) shares of capital stock of the Company, evidences of indebtedness, or any other asset (collectively, the "***Distributed Property***"), then and in each such event, the Conversion Price shall be decreased as of the time of such issuance, by multiplying such Conversion Price by a fraction, the numerator of which shall be the Closing Price of the Common Stock on the Trading Day immediately preceding the ex-dividend date for such dividend and distribution minus the fair market value (as determined in good faith by the Company's board of directors) of the Distributed Property distributed with respect to each share of Common Stock, and the denominator of which shall be the Closing Price of the Common Stock on the Trading Day immediately preceding the ex-dividend date for such dividend and distribution. Notwithstanding the foregoing, in no event shall the Conversion Price be reduced below $[__][(2)] (as may be adjusted pursuant to Section 3(d), the "***Conversion Price Floor***") pursuant to this clause (e). If a distribution or dividend would cause the Conversion Price to be below the Conversion Price Floor if not for the immediately preceding sentence, the Company shall allow the Investor to participate in the dividend or distribution as if it held the number of shares of Common Stock that this Note would be

(2) The Conversion Price Floor for the Notes issued in exchange for Notes R-2 and R-3, and for the Notes to be issued in connection with the Third Closing, is $5.99. The Conversion Price Floor for the Notes issued in exchange for Notes R-4 and R-5 is $2,78,

convertible into at the close of business on the day immediately preceding the ex-dividend date or effective date, as the case may be, for such distribution or dividend, and no adjustment shall be made to the Conversion Price as a result of such distribution or dividend.

(f) **Adjustment for Reclassification, Exchange or Substitution.** If at any time after July 31, 2012, shares of Common Stock of the Company shall be changed into the same or a different number of shares of any class or classes of shares, whether by reclassification, or otherwise (other than a subdivision or combination of shares, share dividend or reorganization, reclassification, merger, consolidation or asset sale provided for elsewhere in this Section 3), then and in each such event the Company shall enter into an amendment to supplement to this Note to provide that the Note will become convertible (subject to Section 3(a)) into the kind and amount of shares and other securities and property receivable upon such reorganization, reclassification, or other change, by holders of the number of shares of Common Stock into which this Note might have been converted immediately prior to such reorganization, reclassification, or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof.

(g) **Reorganizations, Mergers, Consolidations or Asset Sales.** If at any time after July 31, 2012 there is a tender offer, exchange offer, merger, consolidation, recapitalization, sale of all or substantially all of the Company's assets or reorganization involving the shares of Common Stock (collectively, a "***Capital Reorganization***") (other than a merger, consolidation, sale of assets, recapitalization, subdivision, combination, reclassification, exchange or substitution of shares provided for elsewhere in this Section 3), as part of such Capital Reorganization, the Company shall enter into an amendment or supplement to this Note to provide that the Note will become convertible (subject to Section 3(a)) into the number of shares or other securities or property of the Company to which a holder of the number of shares of Common Stock deliverable upon conversion immediately prior to such Capital Reorganization would have been entitled on such Capital Reorganization, subject to adjustment in respect to such shares or securities by the terms thereof. In any such case, appropriate adjustment will be made in the application of the provisions of this Section 3 with respect to the rights of the Investor after the Capital Reorganization to the end that the provisions of this Section 3 (including adjustment of the Conversion Price then in effect and the number of Conversion Shares) and the provisions of the Agreement and the Registration Rights Agreement will be applicable after that event and be as nearly equivalent as practicable. In the event that the Company is not the surviving entity of any such Capital Reorganization, each Note shall become Notes of such surviving entity, with the same powers, rights and preferences as provided herein.

(h) **No Impairment.** The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but will at all times in good faith assist in the carrying out of all the provisions of this Section 3 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the Investor against impairment to the extent required hereunder.

(i) **Certificate as to Adjustments or Distributions.** Upon the occurrence of each adjustment of the Conversion Price or distribution to holders pursuant to this Section 3, the Company at its expense shall promptly compute such adjustment or distribution in accordance with the terms hereof and furnish to the Investor a certificate setting forth the terms of such adjustment or distribution and showing in detail the facts upon which such adjustment or distribution are based and shall file a copy of such certificate with its corporate records.

(j) **Notice of Record Date.** In the event:

(i) that the Company declares a dividend (or any other distribution) on its Common Stock payable in shares of Common Stock, securities, or other assets, rights or properties;

(ii) that the Company subdivides or combines its outstanding shares of Common Stock;

(iii) of any reclassification of the shares of Common Stock (other than a subdivision or combination of the Company's outstanding shares of Common Stock or a share dividend or share distribution thereon);

(iv) of any Capital Reorganization; or

(v) of the involuntary or voluntary dissolution, liquidation or winding up of the Company;

then the Company shall cause to be filed at its principal office, and shall cause to be mailed to the Investor, at least ten (10) days prior to the record date specified in (A) below or twenty (20) days prior to the date specified in (B) below, a notice stating:

(A) the record date of such dividend, distribution, subdivision or combination, or, if a record is not to be taken, the date as of which the holders of shares of Common Stock of record to be entitled to such dividend, distribution, subdivision or combination are to be determined, or

(B) the date on which such reclassification, Capital Reorganization, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of shares of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reclassification, Capital Reorganization, dissolution or winding up.

(k) **Notice of Adjustment to Conversion Price.** The Company will provide notice to the Investor upon the occurrence of any adjustment to the Conversion Price.

(l) **Lockup Agreement.** In the event of an Investor Optional Conversion pursuant to clause (iii) of Section 3(a), the Investor shall not, without the prior written consent of the Company, Transfer any of the Conversion Shares other than as expressly permitted by, and in compliance with, the provisions of this Section 3(l):

(i) the Investor may Transfer any or all of its Conversion Shares to the Company or any of its Subsidiaries;

(ii) the Investor may Transfer all or any of its Conversion Shares in a transaction exempt from the registration requirements under the Securities Act to any of its Affiliates, so long as prior to or concurrent with any such Transfer such Affiliate agrees in writing to be bound by the terms hereunder as the "Investor" and such other terms hereunder applicable to the Investor, and agrees to transfer such Conversion Shares back to the Investor if it ceases to be an Affiliate of the Investor;

(iii) the Investor may Transfer all or any of its Conversion Shares pursuant to the terms of any tender offer, exchange offer, merger, reclassification, reorganization, recapitalization or other similar transaction in which stockholders of the Company are offered, permitted or required to participate as holders of Common Stock, provided that such tender offer, exchange offer, merger, reclassification, reorganization, recapitalization or other transaction has been approved or recommended by the Board of Directors (and which at the time of Transfer continues to be approved or recommended by the Board of Directors); or

(iv) following the date that is six (6) months after the date of such Investor Optional Conversion pursuant to clause (iii) of Section 3(a), the Investor may transfer all or any of its Conversion Shares pursuant to either an effective registration statement that is effective at the time of such transfer or pursuant to Rule 144 promulgated under the Securities Act, and any successor provision thereto.

Notwithstanding anything herein to the contrary, the restrictions set forth in this Article III shall terminate (i) upon the consummation of a Change of Control, or (ii) at such time as the Investor, together with its Affiliates, "beneficially owns" (as such term is defined in Rule 13d-3 and Rule 13d-5 under the Exchange Act) in the aggregate Voting Shares of the Company (measured by voting power rather than number of shares) representing less than five percent (5%) of the total voting power of all outstanding classes of voting stock of the Company.

4. Repurchase Right Upon a Change of Control.

(a) Upon the occurrence of a Change of Control, the Investor will have the right to require the Company to repurchase all or any part of its Notes pursuant to an offer as provided in this Section 4 (the "***Change of Control Offer***") at an offer price in cash equal to 101% of the Face Amount of its Notes, plus any accrued and unpaid interest as of the Change of Control Payment Date (as defined in Section 4(b)(i)) (the "***Change of Control Payment***"), in addition to the Investor's right to convert the Notes pursuant to Section 3 above.

(b) On or before the 30th day after a Change of Control, the Company shall give to the Investor notice (the "***Change of Control Notice***") of the occurrence of the Change of Control and of the Investor's right to receive the Change of Control Payment arising as a result thereof. Each notice of the Investor's right to participate in the Change of Control Offer (the "***Change of Control Repurchase Right***") shall be mailed to the Investor pursuant to Section 15 and shall state:

(i) the date on which the Notes shall be repurchased (the "***Change of Control Payment Date***"), which date shall be no earlier than 30 days and no later than 60 days from the date of the Company's delivery of the Change of Control Notice;

(ii) the date by which the Change of Control Repurchase Right must be exercised, which date shall be no earlier than the close of business on the Trading Day immediately prior to the Change of Control Payment Date;

(iii) the amount of the Change of Control Payment;

(iv) a description of the procedure which the Investor must follow to exercise the Change of Control Repurchase Right, and the place or places where the Notes are to be surrendered for payment of the Change of Control Payment; and

(v) the Conversion Price then in effect and the place where such Notes may be surrendered for conversion.

No failure by the Company to give the Change of Control Notice and no defect in any Change of Control Notice shall limit the Investor's right to exercise its Change of Control Repurchase Right or affect the validity of the proceedings for the repurchase of Notes. If any of the foregoing provisions or other provisions of this Section 4 are inconsistent with applicable law, such law shall govern.

(c) To exercise the Change of Control Repurchase Right, the Investor shall deliver to the Company, on or before the Trading Day immediately prior to the Change of Control Payment Date, (i) written notice of the Investor's exercise of such right, which notice shall set forth the name of the Investor, the Face Amount of Notes held by the Investor to be repurchased, and a statement that an election to exercise the Change of Control Repurchase Right is being made thereby, and (ii) the Notes with respect to which the Change of Control Repurchase Right is being exercised. Such written notice shall be irrevocable, except that the right of the Investor to convert the Notes shall continue until midnight (Eastern Time) on the Trading Day immediately preceding the Change of Control Repurchase Date.

(d) On the Change of Control Payment Date, the Company will (i) accept for payment all Notes or portions thereof properly tendered pursuant to the Change of Control Offer and (ii) deliver cash in the amount of the Change of Control Payment to the Investor in respect of all Notes or portions thereof so tendered. All Notes repurchased by the Company shall be canceled immediately by the Company.

(e) The Company shall publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date.

(f) The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable in connection with the repurchase of the Notes as a result of a Change of Control.

(g) Any Note which is to be repurchased only in part shall be surrendered to the Company and the Company shall execute and make available for delivery to the Investor without service charge, a new Note or Notes, containing identical terms and conditions, each in an authorized denomination in aggregate principal amount equal to and in exchange for the unrepurchased portion of the principal of the Note so surrendered. Any Notes surrendered to the Company pursuant to the provisions of this Section 4 shall be retired and cancelled.

(h) The Company will not be required to make a Change of Control Offer upon a Change of Control if a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in this Section 4 applicable to a Change of Control Offer made by the Company and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

5. Events of Default.

(a) **Definitions.** For purposes of this Note, the following events shall constitute an "***Event of Default***":

(i) default in payment when due (whether at the Final Maturity Date or upon an earlier repurchase) of the principal of, or premium, if any, on this Note;

(ii) default in the payment of an installment of interest on the Notes, which failure continues for thirty (30) days after the date when due;

(iii) failure by the Company for thirty (30) days after notice from the Investor to comply with the provisions of Section 4 or Section 6 of this Note;

(iv) failure by the Company for sixty (60) days after notice from the Investor to comply with any of its other agreements in this Note or the Agreement (other than Section 8.6(b) of the Agreement);

(v) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Debt for money borrowed by the Company (or the payment of which is guaranteed by the Company, whether such Debt or guarantee existed as of the Original Issue Date or is created after the Original Issue Date, which default (a) is caused by a failure to pay principal of or premium, if any, or interest on such Debt prior to the expiration of the grace period provided in such Debt on the date of such default or (b) results in the acceleration of such Debt prior to its express maturity and, in each case in clause (a) or (b), the principal amount of any such Debt, together with the principal amount of any other such Debt that has not been paid when due, or the maturity of which has been so accelerated, aggregates $10,000,000 or more;

(vi) failure by the Company to pay final judgments aggregating in excess of $10,000,000, which judgments are not paid, discharged or stayed for a period of sixty (60) days;

(vii) the Company:

(A) commences a voluntary case under any Bankruptcy Law,

(B) consents to the entry of an order for relief against it in an involuntary case under any Bankruptcy Law,

(C) consents to the appointment of a custodian of it or for all or substantially all of its property,

(D) makes a general assignment for the benefit of its creditors, or

(E) is unable to pay its debts as they become due; or

(viii) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(A) is for relief against the Company;

(B) appoints a custodian of the Company or any of its Significant Subsidiaries or for all or substantially all of the property of the Company; or

(C) orders the liquidation of the Company and the order or decree remains unstayed and in effect for sixty (60) consecutive days; or

(ix) failure by the Company to deliver when due the consideration deliverable upon conversion of this Note, which failure shall continue for a period of five days.

(b) **Notice of Compliance.** The Company shall be required to deliver to the Investor annually a statement regarding compliance with this Note, and the Company shall be required within five (5) days of becoming aware of any Default or Event of Default (or such earlier date as any such statement is provided to the holders of the Debt incurred pursuant to the Securities Purchase Agreement dated as of February 24, 2012) to deliver to the Investor a statement specifying such Default or Event of Default.

(c) **Acceleration.** If any Event of Default occurs and is continuing, the Investor may declare all the Notes to be due and payable immediately. Notwithstanding the foregoing, in the case of an Event of Default described in Section 5(vii) or (viii) with respect to the Company all outstanding Notes will become due and payable without further action or notice. The Investor may rescind an acceleration and its consequences if the rescission would not conflict with any judgment or decree. Notwithstanding the foregoing (or anything to the contrary in the Agreement), the sole remedy of the Investor for a failure by the Company to comply with Section 8.6(b) of the Agreement shall, for the first 365 days after the occurrence of such failure, be the right, by notice to the Company by the Investor, to increase in the rate of interest on this Note to 6% for the first 180 days of such failure, and to 9% thereafter (which increased interest shall constitute liquidated damages for such failure).

(d) **Waiver of Past Defaults.** The Investor may waive any existing Default or Event of Default and its consequences under this Note. Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Note, but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

(e) **Rights of Investor to Receive Payment.** Notwithstanding any other provision of this Note, the right of the Investor to receive payment of the principal of, and premium on, this Note, on or after the respective due dates expressed in the Note (including in connection with a redemption or an offer to purchase), or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of the Investor.

6. Limitation on Debt and Liens. The Company will not, and will not permit its Subsidiaries to, directly or indirectly, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable, contingently or otherwise, with respect to any Debt, and the Company will not issue any Disqualified Stock and the Company will not permit its Subsidiaries to issue shares of preferred stock except for:

(a) Debt in an amount outstanding at any time not to exceed the greater of (i) $200 million in aggregate principal amount or (ii) 50% of the Company's total consolidated assets (as set forth on its most recent balance sheet prepared in accordance with GAAP and filed with the Securities and Exchange Commission after giving effect to any reductions or additions to assets in accordance with GAAP since the date of such balance sheet) (the "***Maximum Debt Amount***") (provided that that the Company and its Subsidiaries may incur (x) Debt in connection with the Notes issued by the Company under the Agreement and Debt in connection with the Class A Note, (y) Debt of Amyris Brasil Ltda. outstanding as of the Issue Date and (z) Debt in connection with the senior convertible notes to be issued by the Company under that certain Securities Purchase Agreement, dated as of August 8, 2013, by and among the Company and the investors identified on Schedule I thereto, as amended (such Debt described in clauses (x), (y) and (z) referred to herein as the "***Existing Debt***"), and provided further that upon incurring such Existing Debt, the Company and its Subsidiaries may have incurred Debt in excess of the Maximum Debt Amount, and so long as the Debt of the Company and its Subsidiaries exceeds the Maximum Debt Amount, the Company and its Subsidiaries shall not be permitted to incur any additional Debt in reliance on this clause (a) without Total's consent) (and provided that Debt incurred pursuant to this clause (a) that is secured by a Lien on assets of the Company shall not exceed the greater of (i) $125 million in aggregate principal amount or (ii) 30% of the Company's total consolidated assets (as set forth on its most recent balance sheet prepared in accordance with GAAP) (the "***Maximum Secured Debt Amount***") (it being understood and agreed that the Notes issued by the Company under the Agreement shall reduce the available Maximum Secured Debt Amount)); provided that neither the Company nor any of its Subsidiaries shall incur any Debt pursuant to this clause 6(a) if the issuance of such Debt would prohibit the Company from issuing the maximum amount of Notes to be issued by the Company under the Agreement;

(b) Debt in existence on February 27, 2012;

(c) the incurrence by the Company or any of its Subsidiaries of Debt represented by Capital Lease Obligations, mortgage financings or purchase money obligations, in each case, incurred for the purpose of financing all or any part of the purchase price or cost of design, construction, installation or improvement of property, plant or equipment used in the business of the Company or any of its Subsidiaries.

(d) Debt of the Company that is (i) contractually subordinated in right of payment to the Notes, (ii) matures 91 days after the Notes and (iii) is less than $50 million in aggregate principal amount at any one time outstanding;

(e) Debt of the Company (A) in respect of performance, surety or appeal bonds or letters of credit in the ordinary course of business, or (B) under interest rate, currency, commodity or similar hedges, swaps and other derivatives entered into with one or more financial institutions that is designed to protect such the Company against fluctuations in interest rates or currency exchange rates, commodity prices or other market fluctuations and is not entered into for speculative purposes; and

(f) Debt which is exchanged for or the proceeds of which are used to refinance or refund, or any extension or renewal of (each a "refinancing"), (1) the Notes or (2) debt in existence on the Original Issue Date, and (3) Debt incurred pursuant to clause (c) of this paragraph, in each case in an aggregate principal amount not to exceed the principal amount of the Debt so refinanced (together with any accrued interest and any premium and other payment required to be made with respect to the Debt being refinanced or refunded, and any fees, costs, expenses, underwriting discounts or commissions and other payments paid or payable with respect to the Debt incurred pursuant to this clause (f)); provided, however, that (A) Debt, the proceeds of which are used to refinance the Notes, or Debt which is pari passu with the Notes (including Debt incurred pursuant to the Securities Purchase Agreement, dated as of February 24, 2012, among the Company and the purchasers named therein) or subordinate in right of payment to the Notes, shall only be permitted if (x) in the case of any refinancing of the Notes or Debt which is pari passu to the Notes (including Debt incurred pursuant to the Securities Purchase Agreement, dated as of February 24, 2012, among the Company and the purchasers named therein), the refinancing Debt is Incurred by the Company and made pari passu to the Notes or subordinated to the Notes, and (y) in the case of any refinancing of Debt which is subordinated to the Notes, the refinancing Debt is incurred by the Company and is subordinated to the Notes in a manner that is at least as favorable to the Investor as that of the Debt refinanced; (B) refinancing Debt with respect to Debt incurred pursuant to clause (c) of this paragraph shall not be secured by a Lien on any assets other than the assets securing the Debt so refinanced, and any improvements or additions thereto, and (C) the refinancing Debt by its terms, or by the terms of any agreement or instrument pursuant to which such Debt is issued, does not have a final maturity prior to the final maturity of the Debt being refinanced.

For purposes of determining compliance with this Section 6, in the event that an item of Debt meets the criteria of more than one of the types of Debt described in the above clauses the Company, in its sole discretion, shall classify, and from time to time may reclassify, such item of Debt.

(g) The Company will not create, incur, assume or suffer to exist any Lien of any kind on any asset now owned or hereafter acquired, except for (a) the Liens described in Section 6(a) and 6(c) (including the refinancing of Liens described in Section 6(c) pursuant to Section 6(f)), (b) Permitted Liens, and (c) any Liens in existence on the Original Issue Date (including the refinancing thereof pursuant to Section 6(f)). Notwithstanding the foregoing, without the prior written consent of the Investor, which consent shall not be unreasonably withheld, the Company will not create, incur, assume or suffer to exist any Lien of any kind on any of its Intellectual Property that is subject to or within the scope of the Amyris License Agreement, unless the secured party acknowledges in writing that its Lien shall not restrict the Company from granting and performing its obligations under any license agreement entered into in accordance with the Amyris License Agreement, and that the rights of the secured party under its Lien shall be subordinate and subject to the rights of the licensees under any such licenses, and (ii) there shall be no restriction on the ability of the Company to create, incur, assume or suffer to exist any Lien of any kind on any of its Intellectual Property that is not subject to or within the scope of the Amyris License Agreement.

As used herein, "***Permitted Liens***" means the following: (a) Liens for taxes, assessments and governmental charges or levies that are not overdue for a period of more than thirty (30) days or which are being contested in good faith; (b) Liens imposed by law, such as materialmen's, mechanics', carriers', workmen's and repairmen's Liens and other similar Liens securing obligations that are not overdue for a period of more than thirty (30) days or that are being contested in good faith; (c) pledges or deposits to secure obligations under workers' compensation laws or similar legislation or to secure public or statutory obligations; (d) easements, rights of way and other encumbrances on title to real property that do not render title to the property encumbered thereby unmarketable or materially adversely affect the use of such property for its present purposes; (e) Liens to secure the performance of bids, trade contracts, leases, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature; (f) landlords' Liens under leases; (g) Liens consisting of leases, subleases, licenses or sublicenses granted to others and not interfering in any material respect with the business of the Company and its Subsidiaries, taken as a whole, and any interest or title of a lessor or licensor under any lease or license, as applicable; (h) Liens arising solely by virtue of any statutory or common law provision relating to banker's Liens, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a creditor depository institution; and (i) Liens securing judgments for the payment of money not constituting an Event of Default under Section 5(a)(vi) or securing appeal or other surety bonds related to such judgments.

7. Successors.

(a) **Merger, Consolidation or Sale of Assets.** The Company shall not consolidate or merge with or into (whether or not the Company is the surviving corporation), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets in one or more related transactions, to another corporation, Person or entity unless:

(i) the entity or Person formed by or surviving any such consolidation or merger (if other than the Company), or the parent company thereof, or the entity or Person to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made assumes all the obligations of the Company under the Notes and the Agreement; and

(ii) immediately after such transaction no Default or Event of Default exists.

(b) **Successor Corporation Substituted.** Upon any consolidation or merger or any transfer of all or substantially all of the assets of the Company in accordance with Section 7(a) hereof, the successor Person formed by such consolidation or into which the Company is merged, or the parent company thereof, or to which such transfer is made shall succeed to and (except in the case of a lease) be substituted for (so that from and after the date of such consolidation, merger or transfer, the provisions of this Note, the Agreement and the Registration Rights Agreement referring to the "Company" shall refer instead to the successor Person and not to the Company), and may exercise every right and power of, the Company under this Note and the Agreement with the same effect as if such successor Person had been named herein as the Company, and (except in the case of a lease) the Company shall be released from the obligations under the Notes and the Agreement except with respect to any obligations that arise from, or are related to, such transaction.

8. Amendment and Waiver. Except as otherwise expressly provided herein, the provisions of this Note may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Investor.

9. Place of Payment. Payments of principal, interest, and premium, if any, consideration deliverable upon conversion of this Note (unless otherwise specified in the conversion notice) and all notices and other communications to the Investor hereunder or with respect hereto are to be delivered to the Investor at the address identified in the Agreement or to such other address or to the attention of such other person as specified by prior written notice to the Company, including any Permitted Transferee of this Note in accordance with Section 3 of this Note.

10. Costs of Collection. In the event that the Company fails to (a) pay when due (including, without limitation upon acceleration in connection with an Event of Default) the full amount of principal, interest and/or premium hereunder or (b) deliver when due the consideration deliverable upon conversion of this Note, the Company shall indemnify and hold harmless the Investor of any portion of this Note from and against all reasonable costs and expenses incurred in connection with the enforcement of this provision or collection of such principal, interest, premium and/or consideration, including, without limitation, reasonable attorneys' fees and expenses.

11. Waivers. The Company hereby waives presentment, demand, notice, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note.

12. Benefits of the Agreement. The Investor and all transferees of this Note (to the extent such transfer is permitted by the Agreement) shall be entitled to the rights and benefits granted to them in the Agreement.

13. Registration of Transfer and Exchange Generally.

(a) **Registration, Registration of Transfer and Exchange Generally.** The Company shall keep at its principal executive offices a register (the register maintained in such being herein sometimes collectively referred to as the "***Note Register***") in which the Company shall provide for the registration of Notes and of transfers and exchanges of Notes.

Subject to the provisions of the Agreement regarding restrictions on transfer and provided the Permitted Transferee agrees to be bound by the terms of this Note and the Agreement, upon surrender for registration of transfer of any Note at its principal executive office, the Company shall execute and deliver, in the name of the designated transferee or transferees, one or more new Notes in denominations requested by the transferee (which denominations shall not be less than $1,000,000 per Note (unless the transferor holds a lesser denomination, in which case no such restriction shall apply)), of a like aggregate principal amount and bearing such restrictive legends as may be required by law.

At the option of the Investor, Notes may be exchanged for other Notes of any authorized denominations, of a like aggregate principal amount and bearing such restrictive legends as may be required by law upon surrender of the Notes to be exchanged at the Company's principal executive offices. Whenever any Notes are so surrendered for exchange, the Company shall execute and make available for delivery the Notes that the Investor making the exchange is entitled to receive.

All Notes issued upon any registration of transfer or exchange of Notes shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits as the Notes surrendered upon such registration of transfer or exchange.

Every Note presented or surrendered for registration of transfer or for exchange shall (if so required by the Company) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company, duly executed by the Investor.

No service charge shall be made for any registration of transfer or exchange of Notes.

(b) **Mutilated, Destroyed, Lost and Stolen Notes.** If any mutilated Note is surrendered to the Company, the Company shall execute and make available for delivery in exchange therefor a new Note of like tenor and principal amount and bearing a number not contemporaneously outstanding.

If there shall be delivered to the Company (i) evidence to its reasonable satisfaction of the destruction, loss or theft of any Note and (ii) such indemnity as may be reasonably requested by the Company to save itself harmless, then, in the absence of notice to the Company that such Note has been acquired by a protected purchaser, the Company shall execute and make available for delivery, in lieu of any such destroyed, lost or stolen Note, a new Note of like tenor and principal amount and bearing a number not contemporaneously outstanding.

Every new Note issued pursuant to this Section 13 in lieu of any mutilated, destroyed, lost or stolen Note shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Note shall be at any time enforceable by anyone.

The provisions of this Section 13 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Notes.

14. Governing Law.

(a) THIS NOTE, AND THE PROVISIONS, RIGHTS, OBLIGATIONS, AND CONDITIONS SET FORTH HEREIN, AND THE LEGAL RELATIONS BETWEEN THE PARTIES HERETO, INCLUDING ALL DISPUTES AND CLAIMS, WHETHER ARISING IN CONTRACT, TORT, OR UNDER STATUTE, SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO ITS CONFLICT OF LAW PROVISIONS.

(b) Any and all disputes arising out of, or in connection with, the interpretation, performance, or nonperformance of this Note or any and all disputes arising out of, or in connection with, transactions in any way related to this Note and/or the relationship between the parties shall be litigated solely and exclusively before the United States District Court for the Southern District of New York. The parties consent to the in personam jurisdiction of said court for the purposes of any such litigation, and waive, fully and completely, any right to dismiss and/or transfer any action pursuant to 28 U.S.C. § 1404 or 1406 (or any successor statute). In the event the United States District Court for the Southern District of New York does not have subject matter jurisdiction of said matter, then such matter shall be litigated solely and exclusively before the appropriate state court of competent jurisdiction located in the state of New York.

15. Notices. All notices, requests, and other communications hereunder shall be in writing and will be deemed to have been duly given and received (a) when personally delivered, (b) when sent by facsimile upon confirmation of receipt, (c) one business day after the day on which the same has been delivered prepaid to a nationally recognized courier service, or (d) five business days after the deposit in the United States mail, registered or certified, return receipt requested, postage prepaid, in each case to the applicable address set forth below:

(i) if to the Company, to:

Amyris, Inc.
5885 Hollis Street, Suite 100
Emeryville, CA 94608
United States of America
Attn: [ ]
Fax. No.: [ ]

with a copy (which shall not constitute notice) to:

[ ]

(ii) if to the Investor, to:

Total Energies Nouvelles Activités USA
24 Cours Michelet
92800 Puteaux
France
Attn: [ ]
Fax. No.: [ ]

with copies (which shall not constitute notice) to:
[ ]
Fax No.: [ ]

and

[ ] Any party hereto from time to time may change its address, facsimile number, or other information for the purpose of notices to that party by giving notice specifying such change to the other parties hereto. The Investor and the Company may each agree in writing to accept notices and other communications to it hereunder by electronic communications pursuant to procedures reasonably approved by it; provided that approval of such procedures may be limited to particular notices or communications.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has executed and delivered this Note on [____________], 201[_].

AMYRIS, INC.

By:____
Name:
Title:

EXHIBIT 1

(To be Executed by Investor in order to Convert Note)

CONVERSION NOTICE
FOR
1.5% SENIOR SECURED CONVERTIBLE NOTE DUE 2017

The undersigned, as holder of the 1.5% Senior Secured Convertible Note due 2017 of **AMYRIS, INC.**, (the "***Company***"), in the outstanding principal amount of U.S. $_________ (the "***Note***"), hereby elects to convert that portion of the outstanding principal amount of the Note shown on the next page into shares of the Company's common stock, $0.0001 par value per share (the "***Common Stock***"), of the Company, accrued and unpaid interest and Make-Whole Interest, if any, in accordance with and in compliance with the conditions of the Note, as of the date written below. The undersigned hereby requests that share certificates for the shares of Common Stock to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered to, the undersigned or its designee as indicated below. If shares are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. No fee will be charged to the Investor for any conversion, except for transfer taxes, if any.

Conversion Information:

TOTAL ENERGIES NOUVELLES ACTIVITÉS USA:

By: ____
Print Name:
Print Title:

Address:
[ ]Attn: [ ]
Fax. No.: [ ]

____

Issue Common Stock: ______________________________

at: ____

Date of Conversion

____

Applicable Conversion Price

____

THE COMPUTATION OF THE NUMBER OF SHARES OF COMMON STOCK TO BE RECEIVED IS SET FORTH ON THE ATTACHED PAGE

Page 2 to Conversion Notice for: Total Energies Nouvelles Activités USA _____________

COMPUTATION OF NUMBER OF COMMON SHARES TO BE RECEIVED

Face Amount converted: $ _________________

Conversion Price $ _________________

Number of shares of Common Stock = Total dollar amount converted / Conversion Price = $ _________________

Number of shares of Common Stock = ____________________________

Please issue and deliver ___ certificate(s) for shares of Common Stock in the following amount(s):

____

____

____

____

Please issue and deliver ______ new Note(s) in the following amounts:

____

____

____

ANNEX C

MARCH 2014 LETTER AGREEMENT

Total Energies Nouvelles Activités USA
24 Cours Michelet
92800 Puteaux
France

March 29, 2014

Amyris, Inc.
5885 Hollis Street, Suite 100
Emeryville, CA 94608
Attention: Mr. John Melo, President & CEO

Reference is made to that certain Amended and Restated Master Framework Agreement (the "Framework Agreement"), dated as of December 2, 2013, by and between Amyris, Inc., a Delaware corporation ("Amyris" or the "Company"), and Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS), a *société par actions simplifiée* organized under the laws of the Republic of France ("Total"), and that certain Securities Purchase Agreement, dated as of July 30, 2012 (the "Purchase Agreement"), by and between Amyris and Total. Capitalized terms used herein and not defined shall have the meanings given to such terms in the Framework Agreement or the Purchase Agreement.

The terms of the Framework Agreement and Purchase Agreement shall be amended as set forth below and, subject to the delivery of such notice and the satisfaction of the conditions set forth below, Total hereby waives its right to not consummate the Third Closing if it makes a "No-Go Decision" (as defined in the Framework Agreement) pursuant to Section 2.2(a) of the Framework Agreement prior to June 30, 2014, and commits to consummate the first installment of the Third Closing by no later than July 31, 2014 and the second installment of the Third Closing by no later than January 31, 2015, subject in each case to the satisfaction of the conditions of such Third Closing set forth in Section 6.2 of the Purchase Agreement and in this letter agreement (other than the condition set forth in Section 6.2(h) of the Purchase Agreement which is hereby expressly waived by Total upon the satisfaction of the Waiver Conditions (as defined below)):

1. The Conversion Price (as defined in the Securities) for the Securities to be issued at each installment of the Third Closing pursuant to the Purchase Agreement shall be reduced to $4.11; *provided* that Amyris shall, to the extent required by the rules and regulations of The NASDAQ Stock Market, obtain stockholder approval with respect to such reduction of the Conversion Price prior to consummation of the first installment of the Third Closing, in accordance with paragraph 2 below; and

2. As a condition to the Third Closing, to the extent required by the rules and regulations of The NASDAQ Stock Market, Amyris shall provide each stockholder entitled to vote at the next scheduled annual meeting of shareholders of Amyris (the "Stockholder Meeting"), which meeting shall held not later than July 31, 2014, a proxy statement soliciting each such stockholder's affirmative vote at the Stockholder Meeting for approval of resolutions (the "Resolutions") providing for Amyris' issuance of all of the Securities to be issued in the Third Closing with a reduced Conversion Price of $4.11 in accordance with applicable law and the rules and regulations of The NASDAQ Stock Market, and Amyris shall use its commercially reasonable efforts to solicit its stockholder's approval of the Resolutions and to cause its Board of Directors to recommend to the stockholders that they approve the Resolutions.

3. In connection with the closing of each installment of the Third Closing, Total shall have the right, in its sole discretion, to reject any qualification or exception to any representation, warranty, covenant or other provision ("Exception") to Sections 3.1 (Organization and Standing), 3.3 (Power), 3.4 (Authorization), 3.5 (Consents and Approvals), 3.6 (Non-Contravention), 3.7 (The Securities), 3.8 (The Underlying Securities), 3.10 (Reporting Status), 3.13 (Legal Proceedings), 3.14 (No Violations), 3.16 (Listing Compliance), 3.18 (Financial Statements),

3.22 (No Material Adverse Change) and, except as qualified by Schedule 3.23 of the March 2013 Disclosure Letter (as defined below), 3.23 (Solvency) of the Purchase Agreement set forth in the disclosure letter to be delivered by Amyris pursuant to Article 3 of the Purchase Agreement to the extent that Total determines that such Exception is adverse to Total in any material respect.

4. Section 5.1(a) of the Framework Agreement is hereby amended to replace the reference to June 30, 2014 with the following:

   "the later of (i) December 31, 2014 and (ii) the date on which Amyris shall have raised $75,000,000 of equity and/or convertible debt financing in one or more transactions consummated on or after March 27, 2014 (excluding for the purpose of such calculation, any Securities issued to Total under this Master Agreement and the SPA),"

5. Amyris shall provide Total, within 5 Business Days after the end of each calendar month, beginning with the month ending March 31, 2014 and ending with the month ending January 31, 2015, a report certified by the Chief Financial Officer of Amyris setting forth Amyris' cash, cash equivalents and short-term investments (including distinguishing between restricted and unrestricted cash) as of the end of such calendar month, in a form that is reasonably acceptable to Total.

Clauses (1) through (5) above are referred to herein as the "Waiver Conditions."

In connection with the execution of this letter agreement, Amyris hereby certifies that the representations and warranties set forth in Article 3 of the Purchase Agreement are true and correct in all material respects as of, and as if made on the date of this letter agreement, except as set forth in the disclosure letter supplied by Amyris to Total and dated as of the date hereof (the "March Disclosure Letter").

This letter agreement, and the provisions, rights, obligations, and conditions set forth herein, and the legal relations between the parties hereto, including all disputes and claims, whether arising in contract, tort, or under statute, shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to its conflict of law provisions. No amendment, modification, termination or cancellation of this letter agreement shall be effective unless it is in writing signed by the Company and Total. In the event that any provision of this letter agreement or the application of any provision hereof is declared to be illegal, invalid, or otherwise unenforceable by a court of competent jurisdiction, the remainder of this letter agreement shall not be affected except to the extent necessary to delete such illegal, invalid, or unenforceable provision unless that provision held invalid shall substantially impair the benefits of the remaining portions of this letter agreement. This letter agreement may be executed in counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when signed by each party hereto and delivered to the other party.

Very truly yours,

TOTAL ENERGIES NOUVELLES ACTIVITÉS USA

By:/s/ Bernard Clement

Name: Bernard Clement
Title: President

Agreed to and accepted as of
the date first written above:

AMYRIS, INC.

By:/s/ John Melo

Name: John Melo
Title: President & CEO

Shareowner Services
P.O. Box 64945
St. Paul, MN 55164-0945

AMYRIS

Address Change? Mark box, sign, and indicate changes below: ☐

TO VOTE BY INTERNET OR TELEPHONE, SEE REVERSE SIDE OF THIS PROXY CARD.

TO VOTE BY MAIL AS THE BOARD OF DIRECTORS RECOMMENDS ON ALL ITEMS BELOW, SIMPLY SIGN, DATE, AND RETURN THIS PROXY CARD.

The Board of Directors Recommends a Vote FOR all Proposals.

The Board of Directors recommends a vote FOR all of the following nominees.

1. Election of the four Class I directors nominated by the Board of Directors to serve on the Board of Directors for a three-year term.

01 Geoffrey Duyk
02 Carole Piwnica
03 Fernando de Castro Reinach
04 HH Sheikh Abdullah bin Khalifa Al Thani

☐ Vote FOR all nominees (except as marked) ☐ Vote WITHHELD from all nominees

Please fold here – Do not separate

(Instructions: To withhold authority to vote for any indicated nominee, write the number(s) of the nominee(s) in the box provided to the right.)

The Board of Directors recommends a vote FOR the following proposal.

2. Approval of a non-binding advisory vote of the compensation of our named executive officers. ☐ For ☐ Against ☐ Abstain

The Board of Directors recommends a vote FOR the following proposal.

3. Approval of an amendment to our certificate of incorporation to increase the number of total authorized shares from 205,000,000 shares to 305,000,000 shares and the number of authorized shares of common stock from 200,000,000 shares to 300,000,000 shares. ☐ For ☐ Against ☐ Abstain

The Board of Directors recommends a vote FOR the following proposal.

4. Ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014. ☐ For ☐ Against ☐ Abstain

The Board of Directors recommends a vote FOR the following proposal.

5. Approval of the issuance of up to $21,700,000 aggregate principal amount of senior secured convertible promissory notes in a private placement transaction and the issuance of the common stock issuable upon conversion of such notes, in accordance with NASDAQ Marketplace Rule 5635. ☐ For ☐ Against ☐ Abstain

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED OR, IF NO DIRECTION IS GIVEN, WILL BE VOTED AS THE BOARD RECOMMENDS.

Date ___________________________________

Signature(s) in Box

Please sign exactly as your name(s) appears on Proxy. If held in joint tenancy, all persons should sign. Trustees, administrators, etc., should include title and authority. Corporations should provide full name of corporation and title of authorized officer signing the Proxy.

AMYRIS, INC.

ANNUAL MEETING OF STOCKHOLDERS

Monday, May 12, 2014
3:00 p.m. Pacific Time

5885 Hollis Street
Suite 100
Emeryville, California

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held May 12, 2014. The Proxy Statement and our 2013 Annual Report to Stockholders are available at http://www.allianceproxy.com/amyris/2014

AMYRIS

proxy

PROXY FOR 2014 ANNUAL MEETING OF STOCKHOLDERS

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF AMYRIS, INC.

The signer of this proxy hereby appoints John Melo, Paulo Diniz and Nicholas Khadder, and each of them, with full power of substitution, to represent the signer and to vote all of the shares of stock in Amyris, Inc. (the “Company”) that the signer is entitled to vote at the Annual Meeting of Stockholders of the Company, to be held at the Company’s headquarters, 5885 Hollis Street, Suite 100, Emeryville, California on Monday, May 12, 2014 at 3:00 p.m. Pacific Time and at any continuation, adjournment or postponement thereof: (1) as hereinafter specified upon the proposals listed on the reverse side and as more particularly described in the company’s Proxy Statement, receipt of which is hereby acknowledged, and (2) in their discretion upon such other matters as may properly come before the meeting.

The shares represented hereby shall be voted as specified. If no specification is made, such shares shall be voted FOR the election of all the nominees listed on the reverse side for the Board of Directors, and FOR Proposals 2, 3, 4 and 5.

Vote by Internet, Telephone or Mail
24 Hours a Day, 7 Days a Week

Your phone or Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

INTERNET
www.proxypush.com/amrs
Use the Internet to vote your proxy until 11:59 p.m. (PT) on May 11, 2014.

PHONE
1-866-883-3382
Use a touch-tone telephone to vote your proxy until 11:59 p.m. (PT) on May 11, 2014.

MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

If you vote your proxy by Internet or by Telephone, you do NOT need to mail back your Proxy Card.

EXECUTIVE OFFICERS

John Melo
President and Chief Executive Officer

Paulo Diniz
Interim Chief Financial Officer

Joel Cherry, Ph.D.
President of Research and Development

Zanna McFerson
Chief Business Officer

BOARD OF DIRECTORS

Philippe Boisseau
Director

Nam-Hai Chua
Director

John Doerr
Director and Chair of the Nominating and Governance Committee

Geoffrey Duyk
Director

Arthur Levinson
Chairman

John Melo
President and Chief Executive Officer

Carole Piwnica
Director and Chair of the Leadership Development and Compensation Committee

Fernando Reinach, Ph.D.
Director

R. Neil Williams
Director and Chair of the Audit Committee

HH Sheikh Abdullah bin Khalifa Al Thani
Director

STOCKHOLDER INFORMATION

Corporate Headquarters

USA
Amyris, Inc.
5885 Hollis Street, Ste. 100
Emeryville, CA 94608
Main Phone: +1 (510) 450-0761
Main Fax: +1 (510) 225-2645

Brazil
Amyris Brasil Ltda.
Campinas, Brasil
Rua John Dalton, 301 – Bloco B – Edificio 3 –
Condomínio Techno Plaza
Campinas, SP 13069-330
Main Telephone: +55 (19) 3783 9450
amyrisbrasil@amyris.com

Transfer Agent

Wells Fargo Shareowner Services
South St. Paul, Minnesota
+1 (800) 401-1957

Independent Auditor

PricewaterhouseCoopers LLP
San Jose, California

Annual Meeting

The 2014 Annual Meeting of Stockholders is scheduled to take place at 3:00 p.m. Pacific Time on Monday, May 12, 2014 at our headquarters in Emeryville, California.

Stock Listing

NASDAQ: AMRS

Investor Relations

We welcome inquiries from our stockholders and other interested investors. To obtain a paper copy of our Annual Report on Form 10-K for fiscal year 2013, including the financial statements and the financial statement schedules contained in the Form 10-K, at no charge, please submit your request in writing by sending an e-mail request to Amyris Investor Relations, attention Joel Velasco, at investor@amyris.com, calling (510) 740 7481, or writing to Amyris Investor Relations at 5885 Hollis Street, Suite 100, Emeryville, California 94608. We also make our Annual Report on Form 10-K, as well as our other SEC filings, available free of charge through the investor relations section of our website located at http://investors.amyris.com/index.cfm as soon as reasonably practicable after they are filed with or furnished to the Securities and Exchange Commission.

Certifications

The most recent certifications by our Chief Executive Officer and Interim Chief Financial Officer pursuant to Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 are filed as exhibits to our Annual Report on Form 10-K for fiscal year 2013. A copy of our Annual Report on Form 10-K as filed with the U.S. Securities and Exchange Commission, including such certifications, is enclosed with this report.