AMYRIS, INC.
Form 10-K
March 31, 2015

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington D.C. 20549
FORM 10-K
(Mark One)

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

For the fiscal year ended December 31, 2014
OR

o 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 o No x
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 o No x
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 x No o
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 x No o
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. x
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	o	Accelerated filer	x
Non-accelerated filer	o (Do not check if a smaller reporting company)	Smaller reporting company	o

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

As of June 30, 2014, 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 $129.3 million, based on the closing price of the registrant's common stock on the NASDAQ Global Select Market on such date. 79,221,937 shares of the Registrant's common stock, par value $0.0001 per share, were outstanding as of January 31, 2015.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of registrant's proxy statement to be delivered to stockholders in connection with the registrant's 2015 Annual Meeting of Stockholders to be held on or about May 20, 2015 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, 2014

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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,” “wo 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, Biossance, Dial-A-Blend, Diesel de Cana , Evoshield, µPharm, Muck Daddy, Myralene, Neossance and No Compromise 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. (or the "company," "Amyris," "we," "us," or "our") has industrialized synthetic biology and is delivering renewable products globally into various markets ranging from consumer care to fuels. We believe industrial synthetic biology represents a third industrial revolution bringing together biology and engineering to generate new, more sustainable materials to meet the growing global demand. We have built a powerful technology platform, robust manufacturing capability, and a strong pipeline of ongoing collaborations with world-leading companies in a variety of industries. We are working to build demand for our current portfolio of products through a network of distributors and through direct sales in the cosmetics, flavors and fragrances, performance materials, and transportation fuels and lubricants markets. We are also engaged in collaborations across a variety of markets, including our current product markets and new markets, to drive additional product sales and partnership opportunities.

Background

Amyris was 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, we developed technology capable of creating microbial strains to produce artemisinic acid - a precursor of artemisinin, an effective anti-malarial drug. In 2008, we granted royalty-free licenses to allow Sanofi-Aventis (or Sanofi), to produce artemisinic acid using our technology. Since 2013, Sanofi has been distributing millions of artemisinin-based anti-malarial treatments incorporating this artemisinic acid. Building on our success with artemisinic acid, in 2007 we began applying our technology platform to develop, manufacture and sell sustainable alternatives to a broad range of materials.

We focused our initial development efforts primarily on the production of Biofene®, our brand of renewable farnesene, a long-chain, branched hydrocarbon molecule that we manufacture using engineered microbes in fermentation. Using farnesene as a first commercial building block molecule, we have developed a wide range of renewable products for our various target markets including cosmetics, pharmaceuticals, flavors and fragrances and fuels. Our technology platform allows us to rapidly develop microbial strains to produce other target molecules, and in 2014, we began manufacturing additional molecules for the flavors and fragrances industry.

Since inception, we have received equity and debt financing from investors ranging from affiliates of Total Energies Nouvelles Activités USA, formerly known as Total Gas & Power USA, SAS (or Total), the international energy company, and Temasek Holdings (Private) Limited, the Singapore sovereign wealth fund, to leading U.S. venture capital and private equity investors such as Kleiner, Perkins, Caufield & Byers and TPG Biotechnology Partners. Our stock is traded on the NASDAQ under the symbol AMRS.

Our Platform

Amyris' microbial engineering and screening technologies modify the way microorganisms process sugars in a fermentation process. We use our proprietary platform to design microbes, primarily yeast, to serve as living factories in established fermentation processes to convert plant-sourced sugars into high-value hydrocarbon molecules instead of low-value alcohol. The first two molecules we developed through this process were artemisinic acid and farnesene. In 2014, we began production of a third molecule at industrial scale and development of various other molecules in our labs. We and our partners develop products from these hydrocarbon ingredients for several target markets, including cosmetics, flavors and fragrances, performance materials, transportation fuels and lubricants. Further, in

connection with our partners we have commercialized products for the cosmetics and flavors and fragrances markets.

We are able to use a wide variety of feedstocks for production, but have focused on accessing Brazilian sugarcane for our large-scale production because of its renewability, low cost and relative price stability. We have also successfully used other feedstocks such as sugar beets, corn dextrose, sweet sorghum and cellulosic sugars at our various manufacturing facilities.

Corporate Information

We were founded in 2003 and completed our initial public offering in 2010. As of January 31, 2015, we had 404 employees (including 245 in the United States and 159 in Brazil). Our corporate headquarters and pilot plant are located in Emeryville, California, and our Brazil headquarters and pilot plant are located in Campinas, Brazil. We have two operating subsidiaries, Amyris Brasil Ltda. (or Amyris Brasil) and Amyris Fuels LLC (or Amyris Fuels). Amyris Brasil oversees establishment and expansion of

our production in Brazil. Amyris Fuels was originally established to help us develop fuel distribution capabilities in the United States by selling ethanol and reformulated ethanol-blended gasoline. In the third quarter of 2012, we transitioned out of the ethanol and ethanol-blended gasoline business to focus our efforts on production and commercialization of renewable products.

Strategy and Business Model

Our mission is to apply inspired science to deliver sustainable solutions for a growing world. We seek to become the world's leading provider of renewable, high-performance alternatives to non-renewable chemicals and fuels. In the past, choosing a renewable product often required producers to compromise on performance or price. With our technology, leading consumer brands can develop products made from renewable sources that offer equivalent or better performance and stable supply with competitive pricing. We call this our No Compromise® value proposition. We aim to improve the world one molecule at a time by providing consumers with the best alternatives.

We have developed and are operating our company under an innovative business model that generates cash from both collaborations and from product sales margins. We believe this combination will enable us to realize our vision of becoming the world’s leading renewable products company.

Collaborations

Collaborations provide us with funding to develop innovative new products that our partners commercialize in the markets that they know best. These collaborative technology-based partnerships also allow for sharing long-term revenue streams from products sales. Our strategy for collaborations can generate value in several ways:

- Partnering with industry leaders helps us identify and develop molecules that address critical supply or performance needs for global markets, while receiving collaboration payments for technology access and research and development.
- We use our manufacturing capabilities to produce the collaboration target molecules and sell them to our partners.
- We participate in value-sharing arrangements based on the cost/benefits to our partners of using the molecules we develop.

We believe this collaboration approach creates long-term shared relationships with aligned incentives for success, and allows us to access the capital and resources necessary to support large-scale production and global distribution of our products.

Product Sales

In addition to our collaborations, for near-term, positive-margin revenues, we have been developing, manufacturing and selling high-value farnesene derivatives such as Neossance® branded emollients for the cosmetics industry. Through our distributor channels for Neossance emollients, we are able to accelerate commercialization of our products. Since its launch in 2011, we have achieved worldwide reach for our Neossance emollients, with our initial high-performance emollient (Neossance squalane) serving as a key ingredient in personal care products for a growing list of cosmetics companies. In 2014, we introduced and began selling our second emollient, Neossance hemisqualane, through our distributors. Hemisqualane is a light emollient with high spreadability and serves as a replacement to petroleum-based paraffins and silicone ingredients.

In addition, in 2014 we established sales of flavors and fragrances ingredients to a collaboration partner, representing our first major product sales of a molecule other than farnesene.

We continue to produce and sell renewable diesel and jet fuel in Brazil though these products have not yet generated net cash contributions to our business. In Brazil, where Amyris Diesel is known as Diesel de Cana™ (“Sugarcane Diesel” in Portuguese), the fuel is used daily by approximately 400 public transit buses in São Paulo and Rio de Janeiro, the country’s largest cities.

Manufacturing

We began industrial-scale production of our products at our contract manufacturing facilities in 2011, and in December 2012, commenced operations at our first purpose-built, large-scale production facility in southeastern Brazil. The multi-product production facility, located in Brotas, in the state of São Paulo, Brazil, is adjacent to an existing sugar and ethanol mill operated by Tonon Bioenergia SA, formerly known as Paraíso Bioenergia (or Tonon). Through 2014, we produced farnesene and an ingredient for the flavors and fragrances industry at commercial scale. Under our manufacturing agreement, Tonon supplies sugarcane juice and certain utilities. Amyris is solely responsible for maintenance and operation of our biorefinery. Our Brotas facility 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 farnesene at the facility. Our first shipment of farnesene produced at the Brotas facility occurred in February 2013, and our first shipment of a flavors and fragrances molecule from the facility occurred in August 2014.

We have completed approximately 50% of the construction on a second Brazilian manufacturing facility (located at the São Martinho S.A. (or São Martinho) mill in Pradópolis, São Paulo state), with approximately double the capacity of the Brotas plant. In 2012, upon consultation with our joint venture partner São Martinho, we suspended construction of this second facility to focus on the completion of our plant in Brotas. We currently expect to complete construction of this second manufacturing facility and commission it to support demand by 2017. Following the completion of our plant at São Martinho, we anticipate expanding our large-scale production capacity of intermediate molecules by entering into agreements with owners of additional sugar and ethanol mills in Brazil.

For many of our products, we perform additional distillation or chemical finishing steps to convert initial target molecules into other finished products, such as renewable squalane, flavors and fragrances ingredients, lubricants, performance polymers and diesel. We have 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 also have agreements with other facilities in the U.S. and Brazil to perform distillation and hydrogenation steps for other products. We may enter into additional agreements with other facilities for finishing services and to access flexible capacity and an array of services as we develop additional products.

Technology

Synthetic biology uses engineering concepts to leverage the power of biology. We have developed innovative microbial engineering and screening technologies that allow us to transform the way micro-organisms process sugars. Specifically, we engineer yeast and use them as living factories to convert sugarcane syrup, through fermentation, into high-value hydrocarbon molecules instead of ethanol, which is its naturally occurring process. Along with our collaboration partners, we use these molecules as building blocks for a wide range of products in our target markets. This is our foundation for providing high-performance, cost competitive and sustainable alternatives to a wide variety of products.

Research and Development

Our ongoing technology development is focused primarily on improving the performance of our production microbial strains and on developing microbial strains that produce targeted molecules. As described in more detail below, our process consists of a series of steps including:

- identifying new target molecules;
- creating new microbial strains capable of producing the target molecules;
- increasing product yield and productivity from microbial strains through strain modification or fermentation process improvements; and,
- translating these steps from lab to commercial scale production consistently.

We devote substantial resources to our research and development efforts. As of January 31, 2015, our research and development organization included approximately 136 employees, 65 of whom held Ph.D.s. Our research and development expenditures were approximately $49.7 million, $56.1 million, and $73.6 million for the fiscal years

ended December 31, 2014, 2013 and 2012, respectively.

Strain Engineering and Scale-Up Process

The primary biological pathway within the microbe that we currently use to produce our target molecules is called the isoprenoid or terpenoid pathway. Isoprenoids constitute a large, diverse class of organic chemicals, with current product applications in a wide range of industries. Implementing the classical engineering cycle of "Design-Build-Test-Learn" with investments of more than $400 million to date for research and development, we have reduced strain engineering time to produce target isoprenoid molecules from years to months, opening up the possibility of quickly producing thousands of different target molecules from fermentation.

We have developed a high-throughput strain engineering system that is currently capable of producing and screening more than 100,000 yeast strains per month, which allows us to achieve approximately a 95% lower cost per strain than we achieved in 2009. We generated more than 485,000 farnesene strains in 2014, surpassing 4.6 million unique strains created since our inception, with each strain testing for improved production of the target molecules. In addition, through our lab-scale and pilot-plant fermentation operations, and our proprietary analytical tools, we are now able to predict with high reliability, the industrial performance of candidate strains in our 200,000-liter fermenters at our Brotas plant.

The following summarizes the key steps in our strain engineering and scale-up processes:

1. Identifying target molecules. We start our process by identifying, usually based on input from collaborators, a commercial application for which we can deliver an attractive No Compromise solution. 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 contain these key chemical structures and that may be produced by our yeast strains.

2. Developing initial strains/proof of concept.We identify the steps required for the target molecule's 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.

3. Improving strain performance and process development. To produce the target molecules at industrial scale, a yeast strain must be improved to increase its 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, a measure of 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.

4. 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, and tested for performance in larger-volume facilities, before it is implemented at our larger-scale manufacturing facilities. Our infrastructure to support this scale-up process includes lab-scale fermenters, operating pilot plants in our facilities in Emeryville, California and Campinas, Brazil, and two 5,000-liter fermenters in our Campinas demonstration facility. Each of these stages mimic the conditions found in larger scale fermentation so that our findings may translate predictably from lab scale to pilot and ultimately to commercial scale.

Products

We are expanding our range of products across five identified markets: 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 and Biofene derivatives. More recently, we have produced at scale and commercialized another target molecule for the flavors and fragrances market.

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

term.

Cosmetics

Through basic chemical finishing steps, we are able to convert our farnesene molecule into squalane, which is used today as a premium emollient in cosmetics and other personal care products. Our Neossance squalane offers performance attributes equal or superior to those of squalane derived from conventional sources. The ingredient traditionally has been manufactured from olive oil or extracted from deep-sea shark liver oil. The relatively high price and unstable supply of squalane in the past meant that its use was generally limited to luxury products or small quantities in mass-market product formulations. With our ability to produce a reliable supply of low-cost squalane, we offer this ingredient at a price that we believe will drive increasing adoption by formulators. In addition to Neossance squalane, we have recently introduced a second, lower-cost emollient for the cosmetics

market. We currently have Neossance emollient supply agreements with several regional distributors, including locations in Japan, South Korea, Europe, Brazil and North America, and in some cases, directly with cosmetics formulators.

Flavors and Fragrances

Our technology allows us 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 the flavors and fragrances market are expensive because there is limited supply and the synthetic alternatives require complex chemical conversions. We offer flavors and fragrances companies a natural route to procure these high-value ingredients without sacrificing cost or quality.

In late 2013, we commenced commercial production of our first fragrance ingredient, which is marketed by our collaboration partner, Firmenich SA (or Firmenich), for a range of applications, from perfumes to laundry detergent. In 2014, we completed our first production campaign of this fragrance oil at our Brotas biorefinery and shipped it to Firmenich. We expect to produce additional quantities of this and other fragrance molecules for our partners.

We are working with several partners, including Firmenich, to develop and commercialize a variety of flavors and fragrances ingredients that are either direct fermentation target molecules or derivatives of target fermentation molecules. As of February 2015, we had 18 molecules in our flavors and fragrances pipeline in various stages of development from early research to scale up for production. Under the agreements with our partners, we receive value in a variety of ways: some include collaboration payments, some contemplate sales of ingredients that we manufacture, and some provide for us to share in the economic value derived through downstream sales of the ingredients.

Performance Materials

Farnesene is an ideal building block molecule for a range of performance materials.

Solvents

We have developed a best-in-class renewable solvent produced from farnesene. In addition to addressing concerns over Volatile Organic Compounds (or VOCs), our sustainably-sourced solvent, which we will market under the brand Myralene™, provides a favorable viscosity profile, superior degreasing power, excellent thermal and hydrolytic stability, low odor, no color, and is biodegradable. Subject to receiving approval from the Environmental Protection Agency (or EPA) under the Toxic Substances Control Act (or TSCA), we will begin commercializing Myralene-based cleaning products as industrial cleaners for the auto service industry and other industrial applications. We are working with various distribution channels to support the launch of this new product.

Polymers

We are developing applications for our farnesene that include high-performance polymers used in tires and other applications. In 2011, we began collaboration with Kuraray Co., Ltd (or Kuraray), with an initial focus on using farnesene-based polymers to replace petroleum-derived additives in tires. During the collaboration, Kuraray developed farnesene-based liquid rubber (LFR) that reacts with tire rubber more easily than traditional materials and strengthens adhesion of rubber components to improve tire shape, stability, and performance. In connection with our collaboration with Kuraray, multiple leading tire manufacturers have conducted and are continuing to conduct performance tests of this liquid rubber in tire formulations. Also, during this period, Kuraray produced and began customer sampling and product evaluation for a new category of elastomer, Hydrogenated Styrenic Farnesene Copolymer (HSFC), which has been shown to possess improved flow properties and low residual strain, opening opportunities for vibration

dampening product applications.

Additional Materials

We are working with Braskem S.A. (or Braskem) and Manufacture Francaise de Pnematiques Michelin (or Michelin) to produce renewable isoprene. In 2014, we expanded our ongoing collaboration for the development of renewable isoprene by adding Braskem as a partner to the project. Separately, we are continuing to evaluate opportunities to leverage our muconic acid platform to expand the application of our technology to a broad range of plastic additives and other high-performance applications.

Transportation Fuels

We have partnered with Total to develop renewable fuels designed to be optimal transportation fuels. Using our hydrocarbon building block, farnesene, we produce a renewable diesel and jet fuel that delivers energy density, engine performance, and storage

properties comparable to the best petroleum fuels today. We are currently selling renewable diesel in metropolitan areas in Brazil and, since late 2014, our renewable jet fuel with our partner Total in initial markets globally. In the future, as our development efforts with Total allow us to produce fuels at lower costs, we expect that our farnesane-based fuels business would be conducted through a joint venture we have established with Total (described in more detail below under "Business-Business Joint Ventures"). Until the joint venture becomes operational, we are operating a limited fuels business.

- Jet Fuel. Our drop-in, renewable jet fuel is compliant with Jet A/A-1 fuel specifications and outperforms conventional petroleum-derived fuel in a range of performance metrics, including fit for purpose and greenhouse gas emission reduction potential, without compromising on performance quality. In 2014, following extensive testing, we received industry acceptance and regulatory approval for our renewable jet fuel in key U.S., European and Brazilian markets. In late 2014, we began selling our renewable jet fuel to airlines, with initial commercial flights underway in Europe.

- Diesel. Our renewable diesel's properties are superior to those of petroleum diesel, allowing it to be used as a drop-in replacement in practically any diesel engine today. In Brazil, Diesel de Cana is used daily by approximately 400 public transit buses in São Paulo and Rio de Janeiro, the country's largest cities. To date, these buses have logged over 30 million kilometers with a blend of Diesel de Cana. Tests carried out by Mercedes-Benz and MAN in Brazil show a significant reduction in the emissions of particulate matter (PM) and oxides of nitrogen (NOx) with as little as 10% blends of Amyris Renewable Diesel in standard low sulfur diesel. The US Maritime Division and US Department of Transportation have validated our diesel as a renewable blend with maritime diesel fuel.

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, and/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. Farnesene 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.

We are pursuing the base oils and lubricants market through Novvi LLC (or Novvi), our joint venture 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). Additional detail regarding our joint venture with Cosan is provided below under "Business-Business Joint Ventures."

Additional Products and Markets

We expect to develop and produce additional molecules in the coming years based on our current pipeline of molecules contracted with collaboration partners, and on our plans for new product introductions, such as the Myralene renewable solvent product that addresses regulatory trends restricting volatile organic compounds, pending testing and regulatory approval.

In addition, in 2015, we commenced marketing and selling cosmetics and personal care products incorporating Biofene derivatives directly to retailers and consumers, initially in the United States. Through this market, we are working to accelerate demand for our products by directly influencing marketing and distribution of our products in the United States, and to generate incremental positive-margin revenues and Biofene volume uptake.

Collaborations

We believe that our leadership in the synthetic biology sector is demonstrated by collaboration partners who come to us to access our synthetic biology platform and industrial fermentation expertise. Together we seek to reduce environmental impact, enhance performance, reduce supply and price volatility, and improve profit margins. Our partners include leading energy and oil companies such as Total, chemical companies such as Braskem and Kuraray, flavors and fragrances companies such as Firmenich and tire companies such as Michelin. Our work has also been funded by the U.S. government, including the Department of Energy (or DOE) and the Defense Advanced Research Projects Agency (or DARPA), to develop technologies and processes capable of improving the ability to produce alternatives to petroleum-sourced products.

In addition to our collaborations for co-development of products, we have established collaborations and joint ventures for the development and commercialization of commodity products that will require larger investment of capital and longer lead times for commercialization than our existing portfolio. Most notably, we have established a collaboration and joint venture with Total

to commercialize Biofene-based diesel and jet fuels. With an exception for our fuels business in Brazil, the collaboration and joint venture establishes an exclusive means for us to develop, produce and commercialize fuels from Biofene. In connection with this arrangement, Total has provided substantial funding for Biofene research and development. In addition to this arrangement with Total, we have established a joint venture with Cosan, a leading producer of lubricants in Brazil, for the worldwide development, production and commercialization of renewable base oils for the automotive, industrial and commercial lubricants markets. The collaboration and joint arrangements with Total and Cosan are described in more below under “Business-Business Joint Ventures.” Additionally, Amyris's proprietary synthetic biology platform may be used for pharmaceutical applications to provide the pharmaceutical industry with an integrated discovery and production process for therapeutic compounds for which a natural source is scarce or unavailable, or for which chemical synthesis is not cost-effective. We expect to establish and develop collaboration relationships with pharmaceutical partners in order to generate chemical diversity relevant to therapeutic target identification.

Business Joint Ventures

Our business strategy is to focus our direct commercialization efforts on higher-value, lower-volume markets while establishing joint ventures to pursue our lower-margin, higher-volume commodity products, including for the commodity fuels and lubricants markets. We believe this approach will facilitate access to capital and resources necessary to support large-scale production and global distribution for our large-market commodity products as we continually improve our technology advantages and costs of production.

Total Amyris BioSolutions B.V.

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 products designed for collaboration efforts independently subject to making royalty payments to the non-producing party, and if we initially decline to collaborate on a project proposed by Total, Total has certain rights to require us to work on a limited number of such projects, subject to various exclusions and at Total's expense. We have retained rights to use jointly-developed technology in the following markets: flavors and fragrances, cosmetics, pharmaceuticals, consumer packaged goods, food additives and pesticides. The first programs we have focused on with Total relate to renewable diesel and jet fuel; however, both parties 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 commenced 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 (Total Amyris BioSolutions B.V.) to produce and commercialize Biofene-based diesel and jet fuels. Total Amyris BioSolutions B.V. was formed 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 without the approval of Total.

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, which Total has fully funded as of January 2015. The collaboration agreements were subject to a series of "Go/No-Go" decision points during the program, under which licenses to our technology could have terminated, and the notes would have remained outstanding and become payable at maturity unless otherwise converted in accordance with their terms. Following the final installment of funding in January 2015, only one "Go/No-Go" decision point remains under the collaboration agreements (such final decision point is expected to occur 30 days following the earlier of December 31, 2016 or the completion of certain milestones under the collaboration agreements). If Total makes a final “Go” decision with respect to the full diesel and jet fuels collaboration, then the notes would be exchanged by Total for equity interests in the joint venture, after which any obligation to pay principal or interest on the exchanged notes (or a portion thereof) would be extinguished. In the event of a “Go” decision only with respect to jet fuel, 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, and 30% of the outstanding notes would be cancelled. If Total makes a "No-Go" decision, all the outstanding notes would remain outstanding and become payable upon maturity (unless otherwise converted in accordance with their terms).

Novvi LLC

In June 2011, we entered into joint venture agreements with 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. In September 2011, we formed Novvi, an entity that is jointly owned by Cosan and us. In March 2013, we entered into additional agreements with Cosan to (i) expand our base oils joint venture with Cosan to also include additives and lubricants and (ii) operate the joint venture exclusively through Novvi. Under these agreements, Amyris and Cosan generally each own 50% of Novvi and each share equally in any costs and any profits ultimately realized by the joint venture.

SMA Indústria Química

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

The joint venture agreements required us to fund the construction costs of the new facility and São Martinho was required to reimburse us up to R$61.8 million (approximately US$23.3 million based on the exchange rate as of December 31, 2014) of the construction costs after SMA commences production. After commercialization, we would market and distribute Amyris renewable products produced by SMA and São Martinho would sell feedstock and provide certain other services to SMA. The cost of the feedstock to SMA would be based on the average return that São Martinho could receive from the production of its current products: sugar and ethanol. We would be required to purchase the output of SMA for the first four years at a price that guarantees the return of São Martinho’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.

We completed a significant portion of the construction of our second Brazilian manufacturing facility and plan to resume construction again as discussed above under "Business-Manufacturing."

Product Distribution and Sales

We distribute and sell (or intend to distribute and sell) our products directly, to chemical distributors or collaborators, or through joint ventures, depending on the market. For most chemical applications, we sell directly to our collaboration partners or, for our consumer care products, distributors and formulators. Generally, our collaboration agreements do not include any specific purchase obligations, and sales are contingent upon achievement of technical and commercial milestones.

In addition to sales through distributor channels and to our collaboration partners, starting in 2015, we will commence marketing and selling cosmetics and personal care products incorporating Biofene derivatives directly to retailers and consumers, initially in the United States.

For transportation fuels in Brazil, we sell our renewable diesel directly to fuels blenders and distributors. For transportation fuels outside of Brazil, we have typically sold our products to Total or to fuels blenders and distributors. Ultimately, we expect to commercialize commodity products, including large-scale sales of 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 United States 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 extended 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 revenue 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 and concentrated our efforts on developing and selling our renewable products.

Renewable product sales to Nikko Chemicals Co. Ltd., and Firmenich and collaboration revenues from Firmenich each accounted for more than 10% of our reported revenues in 2014.

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, 2015, we had 317 issued U.S. and foreign patents and 325 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 initially entered to or are 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.

Petroleum Alternative Companies

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 our transportation fuels products 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.”

GMM Regulations

The use of genetically-modified microorganisms (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 certain strains of yeast 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 vary 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.”

Chemical Regulations

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 90 days to review the filing. A similar requirement exists in Europe under the Registration, Evaluation, Authorization, and Restriction of Chemical Substances (or REACH) regulation.

Fuel Regulations

Our diesel and jet fuel is subject to regulation by various government agencies. In the United States, this includes the EPA and the California Air Resources Board (or CARB). In Brazil, this includes Brazilian Agência Nacional do Petróleo, Gas Natural e Biocombustíveis (or ANP). We have completed significant steps to validate our ability to produce a market-accepted diesel product:

- By design, our diesel 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 EPA, has registered our diesel for use as a 35% blend rate with petroleum diesel in highway vehicles and non-road equipment and we are working to obtain registration for a higher blend with petroleum diesel, which compares to a typical 3-10% blend of other bio-diesel products with petroleum diesel.

- In Europe, we obtained 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. REACH registration is required for the sale and use of our fuels within the applicable European jurisdictions.

- We have received required approvals with ANP for specific uses of our fuel in Brazil and have registered our diesel fuel with the 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 TSCA, clearing the way for us to manufacture and sell farnesane without restrictions in the United States.

For diesel market access, we must also be validated 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 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 numerous manufacturers including 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.

Jet fuel (aviation turbine fuel) validation and specifications are subject to the ASTM International industry consensus process and the ANP national adoption process. Our farnesane is generally approved for use in jet fuel for commercial flights at blends of up to 10%. This jet fuel blend was approved by the ASTM International, in June 2014. ASTM approval is required by U.S. and international regulators before jet fuel can be used commercially. In December 2014, the same jet fuel was approved by ANP, which is an additional step required for Brazil commercialization.

For us to maximize our access to the U.S. fuels market for our fuel products, we will also 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.”

Employees

As of January 31, 2015, we had 404 full-time employees. Of these employees, 245 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 offices and 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, as amended (or the Exchange Act). Therefore, we file periodic reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC 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 Exchange Act 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 SEC.

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, may never achieve or sustain profitability, have significant outstanding debt and have significant debt service obligations for 2015.

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 2015. As of December 31, 2014, we had an accumulated deficit of $819.2 million and had cash, cash equivalents and short term investments of $43.4 million. We have significant outstanding debt and contractual obligations related to capital and operating leases, as well as purchase commitments of $2.9 million. As of December 31, 2014, our debt totaled $232.5 million, net of discount of $80.2 million, of which $17.1 million matures within the next twelve months. In addition to upcoming debt maturities, our debt service obligations over the next twelve months are significant, including $9.5 million of anticipated interest payments (excluding interest paid in kind by adding to outstanding principal) and potential early conversion payment of up to approximately $18.9 million (assuming all note holders convert) that could become due at any time after May 15, 2015 under our outstanding convertible promissory notes sold on May 22, 2014 pursuant to Rule 144A of the Securities Act (or 144A Notes). Furthermore, 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 in a number of different markets. 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 endeavor. 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, until very recently we have only produced Biofene at the Brotas plant. Our attempts to scale production of new molecules at the plant are 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 to service our debt obligations and may not be able to obtain such financing and collaboration funding on favorable terms, if at all.

Our planned 2015 and 2016 working capital needs, our planned operating and capital expenditures for 2015 and 2016, and our ability to service our outstanding debt obligations are dependent on significant inflows of cash from existing and new collaboration partners and cash contribution from growth in renewable product sales. 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. Some of our anticipated financing sources, such as research and development collaborations, are subject to the risk that we cannot meet milestones, that the collaborations may end prematurely for reasons that may be outside of our control (including technical infeasibility of the project or a collaborator's right to terminate without cause), or the collaborations 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. The inability to generate sufficient cash flow, as described above, could have an adverse effect on our ability to continue with our business plans and 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 2015 to support our liquidity needs through the remainder of 2015 and into 2016:

- Effect significant headcount reductions, particularly with respect to employees not connected to critical or contracted activities across all functions of the company, including employees involved in general and administrative, research and development, and production activities.

- Shift focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.

- Reduce production activity at our Brotas facility to levels only sufficient to satisfy volumes required for product revenues forecast from existing products and customers.

- Reduce expenditures for third party contractors, including consultants, professional advisors and other vendors.

- Reduce or delay uncommitted capital expenditures, including non-essential facility and lab equipment, and information technology projects.

- Closely monitor our working capital position with customers and suppliers, as well as suspend operations at pilot plants and demonstration facilities.

The contingency cash plan contemplating these actions is designed to save us an estimated $30.0 million to $40.0 million over the period through March 31, 2016.

Implementing this plan could have a negative impact on our ability to continue our business as currently contemplated, including, without limitation, delays or failures in our 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 an adverse effect on our ability to meet contractual requirements, including obligations to maintain manufacturing operations, and increase the severity of the consequences described above.

Our existing financing arrangements may cause significant risks to our stockholders and may impact our ability to pursue certain transactions and operate our business.

In 2013 and 2014, we completed several equity and debt financings to provide us with cash resources to pursue our business plans. In August 2013, we entered into an agreement 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 (or the August 2013 Financing). The August 2013 Financing was divided into two tranches, the first of which closed in October 2013 and the second of which closed in January 2014. In the October 2013 closing, we issued 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 (including $35.0 million advanced by one of the investors as a bridge loan earlier in October 2013 and approximately $9.2 million cancelled by Total in connection with its exercise of pro rata rights). In the January 2014 closing, we issued an additional $34.0 million in convertible promissory notes for cash proceeds of $28.0 million and cancellation of outstanding convertible promissory notes of approximately $6.0 million by Total in connection with its further exercise of pro rata rights. The terms of the August 2013 Financing include significant potential reductions in the conversion price for the notes issued in the August 2013 Financing 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.

In March 2014, we entered into a loan and security agreement with Hercules Technology Growth Capital, Inc. (or Hercules) to make available to Amyris a loan in the aggregate principal amount of up to $25.0 million and in June 2014, we amended such loan and security agreement with Hercules to simplify and remove certain covenants under the original loan facility and we agreed to incur an additional tranche of debt in the aggregate principal amount of $5.0 million (such loan facility, as amended, is referred to as the Hercules Loan Facility). The Hercules Loan Facility generally becomes due on May 31, 2017. We may repay the loaned amounts before the maturity date if we pay an additional fee of 3% of the outstanding loans (1% if after the twelve-month period following the execution of the loan and security agreement in March 2014). With respect to the initial tranche of $25.0 million, we were also required to pay a 1% facility charge at the closing of such transaction and will be required to pay a 10% end of term charge. The Hercules Loan Facility contains customary covenants and also a covenant requiring the Company to maintain unrestricted, unencumbered cash in an amount equal to at least 50% of the remaining principal amount then outstanding under the Hercules Loan Facility. The Hercules Loan Facility includes customary events of default, including failure to pay amounts due, breaches of covenants and warranties, material adverse effect events, certain cross defaults and judgments, and insolvency. If an event of default occurs, Hercules may require immediate repayment of all amounts due.

In April 2014, we entered into a letter agreement dated as of March 29, 2014 (or the March 2014 Total Letter Agreement) with Total to amend our Amended and Restated Master Framework Agreement (included as part of Shareholders Agreement dated December 2, 2013 and License Agreement dated December 2, 2013 with Total Amyris BioSolutions B.V. (or 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 in December 2013). Under the March 2014 Total Letter Agreement, we agreed to, among other things, (i) amend the conversion price of convertible notes to be issued in 2014 and 2015 (for up to an aggregate of $21.7 million) from $7.0682 to $4.11 subject to stockholder approval at our 2014 annual meeting (to the extent required by applicable law or regulation), and (ii) extend the period during which Total may exchange for other Amyris securities certain outstanding convertible promissory notes in connection with its exercise of its existing pro rata rights from June 30, 2014 to the later of December 31, 2014 and the date on which Amyris raises $75.0 million of equity and convertible debt financing (excluding any convertible promissory notes issued pursuant to that certain Securities Purchase Agreement dated July 30, 2012 by and between Amyris and Total). In consideration of these agreements, Total agreed to waive its right not to consummate the closing of the issuance of the notes to be issued in 2014 and 2015 if it decides not to proceed with the collaboration and makes a "No-Go" decision with respect thereto. In two installments that occurred in July 2014 and January 2015, respectively, we sold and issued $21.7 million in convertible notes to Total. Each installment was in the amount of $10.85 million.

In May 2014, we closed on the offering and sale of $75.0 million aggregate principal amount of 6.50% Convertible Senior Notes due 2019 pursuant to a Purchase Agreement (or the 144A Purchase Agreement) with Morgan Stanley & Co. LLC for resale to certain qualified institutional buyers, (such offering, the 144A Offering).

If our outstanding convertible promissory notes (including those issued in the August 2013 Financing, those issued to Total in connection with our fuels collaboration and those issued pursuant to the 144A Offering) are not converted or cancelled, 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 in connection with our debt financing transactions that have an impact on our ability to engage in certain transactions. For example, the purchase agreement for the August 2013 Financing (or the August 2013 SPA) requires us to obtain the consent of a majority of the purchasers from the August 2013 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 in the August 2013 Financing with pro rata rights under which they could cancel up to the full amount of their outstanding notes to pay for new 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 holders of the notes sold in the August 2013 financing do not support it or such holders intend to exercise their right to cancel and exchange their outstanding notes for new securities and the prospective purchasers of new securities do not support such cancellation and exchange. Also, our outstanding convertible promissory notes (and related agreements) and the Hercules loan agreement include a minimum unrestricted, unencumbered cash covenant and other covenants that restrict us from raising additional financing through debt issuances without consent of these lenders; this could also slow down or limit our ability to pursue debt funding if the holders of our outstanding convertible promissory notes or Hercules do not support it. Additionally, under the 144A Notes, in the event of certain fundamental corporate transactions, such as a change of control, the conversion rate of the 144A Notes will be adjusted in favor of the holders of such notes and the holders have the option to require us to purchase their notes. This could lead to, among other things, liquidity difficulties should we not have sufficient cash when holders elect to cause us to purchase the notes and significant dilution to our stockholders if the conversion rate is adjusted, or could delay or prevent a change of control, including a merger, consolidation or other business combination involving us, or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if that change of control would otherwise benefit our stockholders.

To the extent we issue convertible promissory notes or other debt instruments in the future, we would become subject to various additional covenants, including restrictions on our business or assets, that could cause us to be at risk of defaults. Further, there is no guarantee we will be able to obtain waivers to our existing covenants, to the extent necessary to undertake future financings.

To the extent we obtain funding through the issuance of additional equity securities, our existing stockholders will experience further dilution.

In 2014, we completed private placements of our common stock that resulted in the issuance of approximately 943,396 shares of our common stock. Also, in 2014, we issued approximately $119.9 million in senior convertible promissory notes that are or may become convertible into common stock. As of December 31, 2014, we had issued and outstanding an aggregate total of $255.7 million in senior convertible promissory notes, including interest payable in kind on certain of such notes, that are or may become convertible into common stock. As of December 31, 2014, such issued and outstanding convertible promissory notes consisted of the following:

- $48.3 million of convertible promissory notes with a conversion price of $7.0682 per share, which were issued under agreements signed in 2012, including the arrangement with Total for research and development-related funding,

- $30.0 million of convertible promissory notes with a conversion price of $3.08 per share and, $10.85 million of convertible promissory notes with a conversion price of $4.11 per share, all of which were issued pursuant to our arrangement with Total for research and development-related funding,

- $57.4 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.44 per share issued under the first tranche of the August 2013 Financing (or Tranche I Notes),

- $34.0 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.87 per share issued under the second tranche of the August 2013 Financing (or Tranche II Notes), and

- $75.0 million in convertible promissory notes that are convertible into common stock at a conversion price of $3.74 per share issued in the144A Offering.

In January 2015, we issued an additional $10.85 million senior convertible promissory note with a conversion price of $4.11 per share to Total as part of a planned second installment contemplated by the research and development-related funding closing in July 2014. In addition, in connection with the initial closing of the August 2013 Financing, we issued to Maxwell (Mauritius) Pte Ltd, (or Temasek) a warrant to purchase 1,000,000 shares of our common stock at an exercise price of $0.01 per share, exercisable if and to the extent Total converts certain preexisting convertible promissory notes.

We may undertake further equity or debt offerings in the future in order to grow our business, fund operations or service our existing debt obligations. To the extent we issue further common stock, convertible promissory notes or other equity instruments, such issuances may cause further dilution to our existing stockholders.

Our substantial leverage could adversely affect our ability to fulfill our obligations under our existing indebtedness and may place us at a competitive disadvantage in our industry.

As of December 31, 2014, we had $312.7 million of indebtedness outstanding, of which $121.1 million was secured indebtedness. The foregoing amount of indebtedness does not include approximately $0.3 million in aggregate liabilities of our subsidiaries that we have guaranteed and on which we are primarily liable. As previously described, we may incur additional indebtedness from time to time to finance working capital, product development efforts,

strategic acquisitions, investments and alliances, capital expenditures or other general corporate purposes, subject to the restrictions contained in our existing indebtedness and in any other agreements under which we incur indebtedness. Our significant indebtedness and debt service requirements could adversely affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities. For example, our high level of indebtedness presents the following risks:

- we will be required to use a substantial portion of our cash flow from operations to pay principal and interest on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures, product development efforts, acquisitions, investments and strategic alliances and other general corporate requirements;

- our substantial leverage increases our vulnerability to economic downturns and adverse competitive and industry conditions and could place us at a competitive disadvantage compared to those of our competitors that are less leveraged;

- our debt service obligations could limit our flexibility in planning for, or reacting to, changes in our business and our industry and could limit our ability to pursue other business opportunities, borrow more money for operations or capital in the future and implement our business strategies;

- our level of indebtedness and the covenants within our debt instruments may restrict us from raising additional financing on satisfactory terms to fund working capital, capital expenditures, product development efforts, strategic acquisitions, investments and alliances, and other general corporate requirements; and

- and our substantial leverage may make it difficult for us to attract additional financing when needed.

If we are at any time unable to generate sufficient cash flow from operations to service our indebtedness when payment is due, we may be required to attempt to renegotiate the terms of the instruments relating to the indebtedness, seek to refinance all or a portion of the indebtedness or obtain additional financing. There can be no assurance that we will be able to successfully renegotiate such terms, that any such refinancing would be possible or that any additional financing could be obtained on terms that are favorable or acceptable to us.

A failure to comply with the covenants and other provisions of our debt instruments, including any failure to make a payment when required, could result in events of default under such instruments, and which could permit acceleration of such indebtedness. If such indebtedness is accelerated, it could also constitute an event of default under our other outstanding indebtedness. Any required repayment of our indebtedness as a result of acceleration or otherwise would lower our current cash on hand such that we would not have those funds available for use in our business or for payment on other outstanding indebtedness.

Servicing our indebtedness requires a significant amount of cash and our ability to generate cash may be affected by factors beyond our control.

Our business may not generate cash flow in an amount sufficient to enable us to pay the principal of, or interest on, our indebtedness, or to fund our other liquidity needs, including working capital, capital expenditures, product development efforts, strategic acquisitions, investments and alliances, and other general corporate requirements. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. There can be no assurance that:

- we will generate sufficient cash inflows from collaborations;

- our business will generate sufficient cash flow from operations;

- we will realize cost savings, revenue growth and operating improvements resulting from the execution of our long-term plan; or

- future sources of funding will be available to us in amounts or on the terms sufficient to enable us to fund our liquidity needs.

If we cannot fund our liquidity needs, we will have to take actions such as selling assets, restructuring or refinancing our indebtedness, seeking additional equity capital or reducing or delaying capital expenditures, product development efforts, strategic acquisitions, investments and alliances. Such actions could further negatively impact our ability to generate cash flows. We cannot assure you that any of these remedies could, if necessary, be effected on commercially reasonable terms, or at all, or that they would permit us to meet our scheduled debt service obligations. Our Hercules Loan Facility limits our ability to dispose of assets and, as a result, we may not be allowed, under that document or the

terms of any indebtedness we may incur in the future, to engage in such dispositions to satisfy our debt service obligations. In addition, if we incur additional indebtedness, the risks associated with our substantial leverage, including the risk that we will be unable to service our indebtedness or generate enough cash flow to fund our liquidity needs, could intensify.

Restrictive covenants in our Hercules Loan Facility and the terms of our existing convertible notes, and the terms of any indebtedness we may incur in the future, may materially restrict our ability to operate.

The agreements governing our existing indebtedness, and any indebtedness we may incur in the future, contain, and may contain, affirmative and negative covenants that materially limit our ability to take certain actions, including our ability to incur indebtedness, pay dividends, make certain investments and other payments, enter into certain mergers and consolidations, and encumber and dispose of assets, including some of our intellectual property. The breach of any of these covenants or the failure by us to meet any of these conditions would result in a default under any or all of such indebtedness. If a default occurs under any such indebtedness, all of the outstanding obligations thereunder could become immediately due and payable. If such indebtedness is accelerated, it may result in a default under our other outstanding indebtedness and could lead to an acceleration of such other outstanding indebtedness. Our ability to comply with the provisions of our debt agreements, including debt agreements we may enter into in the future, can be affected by events beyond our control. A default under any debt instrument, if not cured or waived, could result in a material adverse effect on us. We may not have the cash available and may not be able to raise financing in an amount sufficient to pay the indebtedness due as a result of the default or any other indebtedness that may become due as a result of such acceleration.

Our GAAP operating results could fluctuate substantially due to the accounting for the early conversion payment features of outstanding convertible promissory notes.

Several of our outstanding convertible debt instruments are accounted for under Accounting Standards Codification 815, Derivatives and Hedging (or ASC 815) as an embedded derivative. For instance, with respect to our 144A Notes, if the holders elect convert their 144A Notes on or after May 15, 2015, and if the last reported sale price of our common stock for 20 or more trading days (whether or not consecutive) in a period of 30 consecutive trading days ending within five trading days immediately prior to the date we receive a notice of such election exceeds the conversion price in effect on each such trading day, such converting holders will receive an early conversion payment equal to the present value of the remaining scheduled payments of interest that would have been made on the 144A Notes being converted from the earlier of the date that is three years after the date we receive such notice of conversion and maturity of the 144A Notes. The early conversion payment feature of the 144A Notes is accounted for under Accounting Standards Codification 815, Derivatives and Hedging (or ASC 815) as an embedded derivative. ASC 815 requires companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. The fair value of the derivative is remeasured to fair value at each balance sheet date, with a resulting non-cash gain or loss related to the change in the fair value of the derivative being charged to earnings (loss). We have determined that we must bifurcate and account for the Early Conversion Payment feature of the notes as an embedded derivative in accordance with ASC 815. We have recorded this embedded derivative liability as a non-current liability on our consolidated balance sheet with a corresponding debt discount at the date of issuance that is netted against the principal amount of the 144A Notes. The derivative liability is remeasured to fair value at each balance sheet date, with a resulting non-cash gain or loss related to the change in the fair value of the derivative liability being recorded in other income and loss. There is no current observable market for this type of derivative and, as such, we determine the fair value of the embedded derivative using the binomial lattice model.The valuation model uses the stock price, conversion price, maturity date, risk-free interest rate, estimated stock volatility and estimated credit spread. Changes in the inputs for these valuation models may have a significant impact on the estimated fair value of the embedded derivative liabilities. For example, an increase in the company's stock price results in an increase in the estimated fair value of the embedded derivative liabilities. The embedded derivative liability may have, on a GAAP basis, a substantial effect on our balance sheet from quarter to quarter and it is difficult to predict the effect on our future GAAP financial results, since valuation of these embedded derivative liabilities are based on factors largely outside of our control and may have a negative impact on our earnings and balance sheet.

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. For example, in 2012 we determined it was necessary to delay further construction of our large-scale manufacturing facility with São Martinho in order to focus on the construction and commissioning of our Brotas facility. 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 stoppages 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 have just begun using our plant at Brotas to produce molecules beyond Biofene, and we have, until recently, only successfully produced Biofene at scale at the plant. In order to produce additional molecules at Brotas, we have been and will be 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 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 have limited manufacturing sources for our products in 2015 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 ourselves. We may face unexpected difficulties associated with the operation of the plant. For example, we have in the past, at certain contract manufacturing facilities and at the Brotas facility, encountered 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 or transition to producing new molecules, and other similar challenges. We cannot be certain that we will be able to remedy all of such challenges quickly or effectively enough to achieve commercially viable near-term production costs and volumes.

To the extent we secure collaboration arrangements with new or existing partners, we may be required to make significant capital investments at our existing or new facilities in order to produce molecules or other products for such collaborations. Any failure or difficulties in establishing, building up or retooling our operations for these new collaboration arrangements could have a significant negative impact on our business, including our ability to achieve commercial viability for our products, lead to the inability to meet our contractual obligations and could cause us to allocate capital, personnel and other resources from our organization which could adversely affect our business and reputation.

As part of our arrangement to build the plant in Brotas, Brazil we have an agreement with Tonon to purchase from Tonon 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 Tonon that we would have paid if we bought the juice from them. As such, we will be relying on Tonon 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 Tonon does not consent to our purchasing from such third party, we would be required to pay Tonon 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 Tonon using such juice, plus a premium. Tonon 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 Tonon 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 Tonon 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 São Martinho 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 project for SMA Indústria Química (or SMA), our joint venture with São Martinho 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 São Martinho in February 2014 which updated and documented certain preexisting business plan requirements related to the start-up of construction at the plant and set 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 is required to occur no later than March 31, 2017, and (ii) the extension of an option held by São Martinho 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 São Martinho was obligated to contribute up to approximately R$61.8 million (approximately US$23.3 million based on the exchange rate as of December 31, 2014) 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 São Martinho will be completed or commence commercial operations, which means that São Martinho's anticipated contribution will continue to be delayed and may never occur. São Martinho 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 São Martinho, then São Martinho has the right to acquire our interest in the joint venture and if São Martinho becomes controlled, directly or indirectly, by a competitor of ours, then we have the right to sell our interest in the joint venture to São Martinho. 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 São Martinho, 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 São Martinho'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 or other target molecules 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 of $0.7 million from write-off of assets related to contract manufacturing (included in loss on purchase commitments and write off of property, plant and equipment of approximately $1.8 million in the year ended December 31, 2014). Also, contract manufacturing agreements may 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 or 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.

In order to be competitive in the markets we are targeting, our products must have superior qualities or be competitively priced relative to alternatives available in the market. Currently, our costs of production are not low enough to allow us to offer some 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 the risk factors, "Risks Related to Our Business - 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," "Risks Related to Our Business - 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 products profitably or at all," and "Risks Related to Our Business - 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 may 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 and agreements, 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 benefit, we will not be successful in entering these markets and our business will be adversely affected.

In order for our diesel fuel to be accepted in various countries around the world, a significant number of diesel engine manufacturers or operators of large trucking fleets, must determine that the use of our fuels in their equipment will not invalidate product warranties and that they otherwise regard our diesel fuel as an acceptable fuel so that our diesel fuel will have appropriately large and accessible addressable markets. 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 regulatory and/or product safety standards. Meeting these 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 or other limitations on the transport of our fuels, our ability to sell our fuels may be impaired.

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, "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," "Risks Related to Our Business - We may not be able to obtain regulatory approval for the sale of our renewable products," and "Risks Related 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."

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 have initially sought 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 microbes, such as as yeast, bacteria and algae, to convert sugars, in some cases from cellulosic biomass and in others from more refined 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 basis that does not greatly exceed 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 basis that does not greatly exceed these traditional products and other available alternatives. 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, and certain rights we have granted to Total and other existing stockholders in relation to our future securities offerings have substantial impacts 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 respect to certain 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.

Under certain 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 Amyris than other stockholders if Total decides to pursue an acquisition.

Additionally, in connection with subsequent investments by Total in Amyris, 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. Further, Total and other holders of notes issued in the first and second tranches of the August 2013 Financing (or, Tranche I Notes and Tranche II Notes, respectively) have a right to cancel certain outstanding Tranche I Notes and Tranche II Notes to exercise pro rata rights under the August 2013 SPA. To the extent Total and other investors exercise these rights, it will reduce the cash proceeds we may realize from the relevant financing. Additionally, under agreements originally signed in July 2012, as subsequently amended. Total previously had the right to cancel up to $30.0 million of certain outstanding convertible promissory notes. Total has since, in financings that closed in December 2012, October 2013, December 2013, January 2014, and May 2014 used and extinguished that right (with approximately $9.7 million of such rights extinguished by agreement of Amyris and Total in connection with the 144A Offering in May 2014 when we used approximately $9.7 million of the proceeds from the 144A Offering to repay certain senior secured convertible notes held by Total, which equaled the amount of Total's participation in the 144A Offering).

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 with Total 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 without the approval of Total. 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, which, as of January 2015 Total has fully funded.The collaboration agreements were subject to a series of "Go/No-Go" decision points during the program, under which licenses to our technology could have terminated, and the notes would have remained outstanding and become payable at maturity unless otherwise converted in accordance with their terms. Following the final installment of funding in January 2015, only one "Go/No-Go" decision point remains under the collaboration agreements (such final decision point is expected to occur 30 days following the earlier of December 31, 2016 or the completion of certain milestones under the collaboration agreements). If Total 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 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 exchange 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. If Total makes a final decision not to proceed with any of the operational fuels joint venture, all the outstanding notes would remain outstanding and become payable upon maturity (unless otherwise converted in accordance with their terms).

As more fully described above, 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, which, as of January 2015, Total has fully funded. If Total chooses, at a final decision point described above, not to proceed with an operational fuels joint venture, 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. We cannot be certain that Total will ultimately opt to participate in an operational fuels joint venture. If Total were to decide not to proceed with the operational fuels joint venture, 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 revenues 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 and the success of such products is uncertain.

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 2015 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.As part of our current and future collaboration arrangements, we may be required to make significant capital investments at our existing or new facilities in order to produce molecules or other products for such collaborations. Any failure or difficulties in establishing, building up or retooling our operations for these collaboration arrangements could have a significant negative impact on our business, including our ability to achieve commercial viability for our products, lead to the inability to meet our contractual obligations and could cause us to allocate capital, personnel and other resources from our organization which could adversely affect our business and reputation.

With respect to pharmaceutical collaborations, our experience in this industry is limited, so we may have difficulty identifying and securing collaboration partners and customers for pharmaceutical applications of our products and services. Furthermore, our success in pharmaceuticals depends primarily upon our ability to identify and validate new small molecule compounds of pharmaceutical interest (including through the use of our discovery platform), and

identify, test, develop and commercialize such compounds. Our research efforts may initially show promise in discovering potential new therapeutic candidates, yet fail to yield viable product candidates for clinical development for a number of reasons, including:

•because our research methodology, including our screening technology, may not successfully identify medically relevant product candidates;
•we may identify and select from our discovery platform novel, untested classes of product candidates for the particular disease indication we are pursuing, which may be challenging to validate because of the novelty of the product candidates or we may fail to validate at all after further research work;
•our product candidates may cause adverse effects in patients or subjects, even after successful initial toxicology studies, which may make the product candidates unmarketable;
•our product candidates may not demonstrate a meaningful benefit to patients or subjects; and

•collaboration partners may change their development profiles or plans for potential product candidates or abandon a therapeutic area or the development of a partnered product.

Research programs to identify new product targets and candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential discovery efforts, programs or product candidates that ultimately prove to be unsuccessful.

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, labor 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. Furthermore, there are various non-governmental and quasi-governmental organizations that review and certify products with respect to the determination of whether products can be categorized as “natural” or other similar classifications. While the certification from such non-governmental and quasi-governmental organizations is generally not mandatory, some of our current or prospective customers or distributors may require that we meet the standards set by such organizations as a condition precedent to purchasing or distributing our products. We cannot be certain that we will be able to satisfy the standards of such organizations, and any delay or failure to do so could harm our ability to sell or distribute some or all of our products to certain customers and prospective customers, which could have a negative impact on our business.

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 new chemicals. Before an entity can manufacture or distribute a new chemical subject to TSCA, it must file a Pre-Manufacture Notice (or PMN) to add the chemical or a product. The EPA has 90 days to review the filing but may request additional data which significantly extends the timeline for approval. As a result we may not receive EPA approval to list future molecules as expeditiously as we would like in order to make it 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, chemicals imported or manufactured in the European Union in certain quantities must be registered with the European Chemicals Agency, and this process could cause delays or significant costs. To the extent that other geographies in which we are selling (or may seek to sell) our products, such as Brazil and various countries in Asia, 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, or any relevant local authorities in such other geographies, may subsequently delay entry into these markets as well. In addition, some of our Biofene-derived products are sold for the cosmetics market, and some countries may impose additional regulatory requirements or permits for such uses, which could impair, delay or prevent sales of our products in those markets.

Our diesel and jet fuel is subject to regulation by various government agencies, including the EPA, CARB, EC 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. Farnesane is also listed on the TSCA inventory. 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 less than 1,000 metric tons of farnesane (for use as diesel and jet fuel) per year and are pursuing data collection to maintain registration. Registration with each of these bodies is required for the import, sale and use of our chemicals 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 has been validated and supported by an applicable ASTM aviation turbine fuel standard and the ANP approval. In addition, for us to achieve full sale 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 pathway certifications could impair our ability to fully 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 to 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 some of our renewable products and may otherwise adversely affect our business.

While many of our products do not compete with, and do not serve as alternatives to, petroleum-based products, we anticipate that some 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 certain of our products as cost-effective alternatives to petroleum-based products. Declining oil prices, or the perception of a sustained or future decline in oil prices, may adversely affect the prices or demand for such products. During sustained periods of lower oil prices we may be unable to sell such products, which could impact our operating results.

A limited number of distributors, customers and collaboration partners account for a significant portion of our revenue, and the loss of major distributors, customers or collaboration partners could harm our operating results.

Our revenues may vary significantly from quarter to quarter and are often dependent on sales to, and collaborations with, a limited number of distributors, customers and/or collaboration partners. We cannot be certain that distributors, customers and/or collaboration partners that have accounted for significant revenue in past periods, individually or as a group, will continue to generate similar revenue in any future period. If we lose or fail to renew arrangements with, a major distributor, customer or collaborator or group of distributors, customers or collaborators, our revenue could decline if we are unable to replace the lost revenue with revenue from other sources.

Future revenues are difficult to predict, and our failure to predict revenues accurately may cause our results to be below our expectations or those of analysts or investors and could result in our stock price declining.

The sales volume of our products in any given period can be difficult to predict. A portion of our product sales is dependent upon the interest and ability of third party distributors to create demand for, and generate sales of, such products to end-users. If such distributors are unsuccessful in creating pull-through demand for our products with their customers, such distributors may not purchase as many of our products. In addition, many of our new and novel products are intended to be a component of other companies' products; therefore, sales of our products may be contingent on our collaborators' and/or customers' timely and successful development and commercialization of end-use products that incorporate our products.

In addition, we have entered into, and continue to look for, research and development collaboration arrangements pursuant to which we receive payments from our collaborators, some of such collaboration arrangements include advance payments in consideration for grants of exclusivity or research efforts to be performed by us. As a result, a portion of the revenues we report each quarter results from the recognition of deferred revenue from advance payments we have received from these collaborators during previous quarters. To the extent our business model depends on collaboration agreements with advance payments that we recognize over time, it may also be difficult for us to rapidly increase our revenues through additional collaborations in any period, as revenues from such new collaborations will often be recognized over multiple quarters or years.

Factors such as these make it difficult to predict future revenues and may result in our revenue being below our previously announced guidance or analysts' estimates, which would likely cause our stock price to decline.

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 or the transition to, and ramp up of, producing new molecules at our existing facilities;

- delays or greater than anticipated expenses associated with the producing new molecules at our existing facilities;

- impairment of assets based on shifting business priorities and working capital limitations;

- disruptions in the production process at any manufacturing facility, including disruptions due to seasonal or unexpected downtime at our facilities as a result of feedstock availability, contamination, safety or other issues or other technical difficulties or the scheduled downtime at our facilities as a result of transitioning our equipment to the production of different molecules;

- losses of, or inability to secure new, major customers, suppliers, distributors or collaboration partners;

- 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 or delays 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 2015, we are planning to keep our expenditures relatively consistent with prior years.

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 the United States, Brazil and other countries we may seek to operate in, 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 404 at January 31, 2015. 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 January 31, 2015, we had 317 issued United States and foreign patents and 325 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 United States Patent Office (or USPTO). Additional uncertainty may result from 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. 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 pending patent applications or those pending 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. 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. 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:

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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.

We do not have exclusive rights to intellectual property we developed under U.S. federally funded research grants and contracts, including with DARPA and we could ultimately share or lose the rights we do have under certain circumstances.

Some of our intellectual property rights have been or may be developed in the course of research funded by the U.S. government, including under our agreements with DARPA. As a result, the U.S. government may have certain rights to intellectual property embodied in our current or future products pursuant to the Bayh-Dole Act of 1980. Government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right to require us to grant exclusive licenses to any of these inventions to a third party if they determine that: (i) adequate steps have not been taken to commercialize the invention, (ii) government action is necessary to meet public health or safety needs, or (iii) government action is necessary to meet requirements for public

use under federal regulations. The U.S. government also has the right to take title to these inventions if we fail to disclose the invention to the government and fail to file an application to register the intellectual property within specified time limits. In addition, the U.S. government may acquire title in any country in which a patent application is not filed within specified time limits. If any of our intellectual property becomes subject to any of the rights or remedies available to the U.S. government or third parties pursuant to the Bayh-Dole Act of 1980, this could impair the value of our intellectual property and could adversely affect our business.

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, chemical finishers or customers or end users of our products. 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. Furthermore, any such claims, even if without merit, could require us to incur significant costs to defend the claims, distract management’s attention or damage our reputation.

If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or in a timely manner 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 and could lead to delays in our external reporting. 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 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, 2014, we had a net carrying value of approximately $6.1 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, 2014, even if we attain profitability.

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

We have contracts or subcontracts with certain governmental agencies or their contractors. Generally, these agreements, as they may be amended or modified from time to time, 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 these government agencies terminate these agreements 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 and tsunami 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 January 31, 2015, the reported closing price for our common stock on the NASDAQ Global Select Market was $1.72 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 or changes in the prices of commodities that some of our products may replace, such as oil and other petroleum sourced products;
- 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 were involved in two such lawsuits, which were dismissed in 2014, and we may be the target of similar 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 January 31, 2015:

- our executive officers and directors and their affiliates (including Total) together held approximately 42% of our outstanding common stock;
- Total held approximately 20.5% of our outstanding common stock; and
- two of the 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 25.9% 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 agreements 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.

Conversion of our outstanding convertible promissory notes will dilute the ownership interest of existing stockholders or may otherwise depress the market price of our common stock.

The conversion of some or all of our outstanding convertible promissory notes will dilute the ownership interests of existing stockholders. Any sales in the public market of the shares of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of our outstanding convertible promissory notes, particularly the 144A Notes, may encourage short selling by market participants because the anticipated conversion of such notes into shares of our common stock could depress the market price of our common stock.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table provides the names, ages and offices of each of our executive officers as of March 31, 2015:

Name	Age	Position
Executive Officers:		
John Melo	48	Director, President and Chief Executive Officer
Raffi Asadorian	45	Chief Financial Officer
Joel Cherry, Ph.D.	54	President of Research and Development
Nicholas Khadder	41	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.

Raffi Asadorian

Raffi Asadorian has served as our Chief Financial Officer since January 2015. Prior to joining us, Mr. Asadorian served from 2009 to 2014 as Chief Financial Officer of Unilabs S.A., a pan-European medical diagnostics company based in Geneva, Switzerland and before that, he served at Barr Pharmaceuticals as Senior Vice President and Chief Financial Officer of the PLIVA Group. Prior to this, Mr. Asadorian was a Partner at PricewaterhouseCoopers ("PwC") in its Transaction Services (mergers and acquisitions advisory) group in New York, where he worked for 16 years. Mr. Asadorian holds a Bachelor of Science in Business Administration degree from Xavier University and a Master of Business Administration degree from the University of Manchester (U.K.).

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.

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 our space in Emeryville, we use approximately 113,000 square feet for general office purposes and lab space, and approximately 23,000 square feet comprise our pilot plant. In May 2014, pursuant to a sublease agreement and related documents, we agreed to provide Total with access to certain portions of our pilot plant facilities for a period of five years. Such subleased area is approximately 22,021 square feet and is composed of two areas, a dedicated area accessible only to Total, comprising approximately 3,671 square feet and a common area which is shared by the Company and Total, comprising approximately 18,350 square feet. Our master 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, Tonon Bioenergia S.A. (or Tonon). 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

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 2014		
Fourth quarter	$3.88	$1.92
Third quarter	$4.50	$3.38
Second quarter	$4.88	$2.75
First quarter	$5.47	$3.29
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

Holders

As of January 31, 2015, 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 11 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, 2014 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 51 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	6/29/2012	9/28/2012	12/31/2012	3/29/2013	6/28/2013	9/30/2013	12/31/2013	3/31/2014	6/30/2014	9/30/2014	12/31/2014
Amyris, Inc.	$ 100	$ 162	$ 173	$ 170	$ 123	$ 70	$ 31	$ 27	$ 21	$ 19	$ 19	$ 18	$ 14	$ 32	$ 23	$ 23	$ 23	$ 12
S&P SmallCap 600 Index	$ 100	$ 116	$ 124	$ 124	$ 99	$ 116	$ 129	$ 124	$ 130	$ 133	$ 148	$ 153	$ 169	$ 185	$ 187	$ 190	$ 177	$ 194
NASDAQ Clean Edge Green Energy Index	$ 100	$ 109	$ 112	$ 102	$ 66	$ 64	$ 72	$ 62	$ 59	$ 63	$ 74	$ 94	$ 108	$ 119	$ 135	$ 136	$ 127	$ 115

(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 note 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 aggregate cash proceeds of $5.0 million.

On April 30, 2014, we sold 943,396 shares of common stock at a price of $4.24 per share for aggregate cash proceeds of $4.0 million.

Promissory Notes

Between 2013 and early 2015, we issued approximately $130.7 million in senior convertible promissory notes that are or may become convertible into common stock. As of December 31, 2014, we had issued an aggregate total of $255.7 million in senior convertible promissory notes, including those bearing interest payable in kind, that are or may become convertible into common stock. In January 2015, we issued a further $10.85 million in senior convertible promissory notes. As of December 31, 2014, such issued and outstanding convertible promissory notes consisted of the following:

- $48.3 million of convertible promissory notes with a conversion price of $7.0682 per share, which were originally issued under agreements signed in 2012, including the arrangement with Total for research and development-related funding. These notes were exchanged on December 2, 2013 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.

- $30.0 million of convertible promissory notes with a conversion price of $3.08 per share pursuant to our arrangement with Total for research and development-related funding. These notes were sold on June 6, 2013 and July 26, 2013 for $10.0 million and $20.0 million, respectively.

- $57.4 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.44 per share issued under the first tranche of the August 2013 Financing. These notes were sold on October 16, 2013. In addition, in connection with the initial closing of the August 2013 Financing, we issued to Maxwell (Mauritius) Pte Ltd, (or Temasek) a warrant to purchase 1,000,000 shares of our common stock at an exercise price of $0.01 per share, exercisable if and to the extent Total converts certain preexisting convertible promissory notes. We may undertake further equity or debt offerings in the future in order to grow our business or fund operations. To the extent we issue further common stock, convertible promissory notes or other equity instruments, such issuances may cause further dilution to our existing stockholders.

- $34.0 million in convertible promissory notes that are convertible into common stock at an initial conversion price of $2.87 per share issued under the second tranche of the August 2013 Financing. On December 24, 2013, we agreed to sell approximately $34.0 million of convertible promissory notes in the second tranche of the August 2013 Financing (or Tranche II Notes) 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 on 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 (a) according to proportional adjustments to outstanding common stock in case of certain dividends and distributions, (b) according to anti-dilution provisions, and (c) 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.

$75.0 million in convertible promissory notes that are convertible into common stock at a conversion price of $3.74 per share issued in the144A Offering. On May 22, 2014, we entered into a purchase agreement with Morgan Stanley & Co. LLC, as the initial purchaser (or the Initial Purchaser), relating to the sale of $75.0 million aggregate principal amount of its 6.50% Convertible Senior Notes due 2019 (or the 144A Notes) to the Initial Purchaser in a private placement, and for initial resale by the Initial Purchaser to certain qualified institutional buyers (or the Rule 144A Convertible Note Offering). In addition, the Company granted the Initial Purchaser an option to purchase up to an additional $15.0 million aggregate principal amount of 144A Notes, which option expired according to its terms. Under the terms of the 144A Purchase Agreement, the Company agreed to customary indemnification of the Initial Purchaser against certain liabilities. The Notes were issued pursuant to an Indenture, dated as of May 29, 2014 (or the Indenture), between the Company and Wells Fargo Bank, National Association, as trustee. The net proceeds from the offering of the 144A Notes were approximately $72.0 million after payment of the Initial Purchaser's discounts and offering expenses. In addition, in connection with obtaining a waiver from Total of its preexisting contractual right to exchange certain senior secured convertible notes previously issued by the Company for new notes issued in the offering, the Company used approximately $9.7 million of the net proceeds to repay previously issued notes (representing the amount of 144A Notes purchased by Total from the Initial Purchaser). Certain of the Company's affiliated entities, including Total, Temasek and funds affiliated with John Doerr, purchased $24.7 million in aggregate principal amount of 144A Notes from the Initial Purchaser. The 144A Notes bear interest at a rate of 6.50% per year, payable semiannually in arrears on May 15 and November 15 of each year, with the first such interest payment made on November 15, 2014. The 144A Notes will mature on May 15, 2019 unless earlier converted or repurchased. The 144A Notes are convertible into shares of the Company's common stock at any time prior to the close of business day on May 15, 2019. The 144A Notes will have an initial conversion rate of 267.0370 shares of Common Stock per $1,000 principal amount of 144A Notes (subject to adjustment in certain circumstances). This represents an initial effective conversion price of approximately $3.74 per share of common stock. For any conversion on or after May 15, 2015, in the event that the last reported sale price of the Company's common stock for 20 or more trading days (whether or not consecutive) in a period of 30 consecutive trading days ending within five trading days immediately prior to the date the Company receives a notice of conversion exceeds the conversion price of $3.74 per share on each such trading day, the holders, in addition to the shares deliverable upon conversion, will be entitled to receive a cash payment equal to the present value of the remaining scheduled payments of interest that would have been made on the 144A Notes being converted from the conversion date to the earlier of the date that is three years after the date the Company receives such notice of conversion and maturity (May 15, 2019). In the event of a fundamental change, as defined in the Indenture, holders of the 144A Notes may require the Company to purchase all or a portion of the 144A Notes at a price equal to 100% of the principal amount of the 144A Notes, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. Holders of the 144A Notes who convert their 144A Notes in connection with a make-whole fundamental change will receive additional shares representing the present value of the remaining interest payments which will be computed using a discount rate of 0.75%. If a holder of 144A Notes elects to convert their 144A Notes prior to the effective date of any make-whole fundamental change, such holder will not be entitled to an increased conversion rate in connection with such conversion.

$21.7 million of convertible promissory notes with a conversion price of $4.11 per share pursuant to our arrangement with Total for research and development funding ($10.85 million of such $21.7 million was issued in a second installment to Total in January 2015). On July 31, 2014 and January 30, 2015, we sold $10.85 million and $10.85 million of 1.5% Senior Unsecured Convertible Notes Due 2017, respectively for the aggregate amount of $21.7 million in cash. These notes have a March 1, 2017 maturity date and a conversion price equal to $4.11 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. Total, the holder of these notes, has a right to require repayment of 101% of the principal amount of the notes in the event of a change of control of 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.

A placement agent was used in connection with the sale of securities to one of the purchasers in the convertible note financing we closed in January 2014, and in connection with the 144A Offering, Morgan Stanley & Co. LLC served as the Initial Purchaser. In the other sales of securities described above, no underwriters were involved. Such 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, 2014, 2013 and 2012 and the selected consolidated balance sheets data as of December 31, 2014 and 2013 are derived from our audited Consolidated Financial Statements, appearing elsewhere in this Annual Report on Form 10-K. The selected consolidated statements of operations data for the years ended December 31, 2011 and 2010 and the selected consolidated balance sheets data as of December 31, 2012, 2011 and 2010 are derived from our audited Consolidated Financial Statements not included in this Annual Report on Form 10-K. 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 Annual Report on Form 10-K.

	Years Ended December 31,				
	2014	2013	2012	2011	2010
	(In Thousands, Except Share and Per Share Amounts)				
Consolidated Statements of Operations Data:					
Total revenues	$43,274	$41,119	$73,694	$146,991	$80,311
Total cost and operating expenses	$143,102	$160,735	$275,516	$326,163	$164,096
Net loss from operations	$(99,828)	$(119,616)	$(201,822)	$(179,172)	$(83,785)
Net income (loss) before income taxes and loss from investment in affiliate	$5,572	$(235,754)	$(205,052)	$(178,959)	$(82,790)
Net income (loss) before loss from investment in affiliate	$5,077	$(234,907)	$(206,033)	$(179,511)	$(82,790)
Net income (loss)	$2,167	$(234,907)	$(206,033)	$(179,511)	$(82,790)
Net income (loss) attributable to Amyris, Inc. common stockholders	$2,286	$(235,111)	$(205,139)	$(178,870)	$(123,879)
Net income (loss) per share attributable to common stockholders:					
Basic	$0.03	$(3.12)	$(3.62)	$(3.99)	$(8.35)
Diluted	$(0.90)	(3.12)	(3.62)	(3.99)	(8.35)
Weighted-average shares of common stock outstanding used in computing net income/loss per share of common stock:					
Basic	78,400,098	75,472,770	56,717,869	44,799,056	14,840,253
Diluted	121,859,441	75,472,770	56,717,869	44,799,056	14,840,253

	As of December 31,				
	2014	2013	2012	2011	2010
	(In Thousands)				
Consolidated Balance Sheets Data:					
Cash, cash equivalents, investments and restricted cash	$45,041	$9,944	$31,644	$103,592	$257,933
Working capital[2]	$33,606	$(382)	$3,668	$47,205	$242,818
Property, plant and equipment, net	$118,980	$140,591	$163,121	$128,101	$54,847
Total assets	$216,183	$198,864	$242,834	$320,111	$357,453
Derivative liabilities	$59,736	$134,717	$9,261	$—	$—
Total indebtedness[1]	$233,277	$153,305	$106,774	$47,660	$12,590

Total equity (deficit)	$(125,063)	$(135,848)	$66,229	$160,812	$307,548

(1) Total indebtedness as of December 31, 2014, 2013, 2012, 2011 and 2010 includes $0.8 million, $1.2 million, $2.6 million, $6.3 million, and $5.9 million, respectively, in capital lease obligations, zero, zero, $1.6 million, $3.1 million, and $5.7 million, respectively, in notes payable,$21.1 million, $25.3 million, $26.2 million, $19.4 million and $1.0 million, respectively, in loans payable, $35.7 million, $8.8 million, $12.4 million, $18.9 million, and zero, respectively, in credit facilities. Total indebtedness as of December 31, 2014, 2013 and 2012 also included $60.4 million, $28.5 million and $25.0 million, respectively, in convertible notes and $115.2 million,

$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 and 2010 (see Note 5, "Debt" and Note 6, "Commitments and Contingencies" to our Consolidated Financial Statements).

(2) Including cash and cash equivalents, investments and restricted cash.

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 industrial bioscience technology 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 bioscience technology 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. We have also advanced initial construction of a second large-scale production plant in Brazil, located at the São Martinho 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.

Relationship with Total S.A.

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 (collectively referred to as the July 2012 Agreements). 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 without the approval of Total.

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, which as of January 2015, had been completely funded by Total. The collaboration agreements were subject to a series of "Go/No-Go" decision points during the program, under which licenses to our technology could have terminated, and the notes would have remained outstanding and become payable at maturity unless otherwise converted in accordance with their

terms. Following the final installment of funding in January 2015, only one "Go/No-Go" decision point remains under the collaboration agreements (such final decision point is expected to occur 30 days following the earlier of December 31, 2016 or the completion of certain milestones under the collaboration agreements). If Total makes a final "Go" decision with respect to the full fuels collaboration, then the notes will be exchanged by Total for equity interests in the joint venture, after which the notes will not be convertible and any obligation to pay principal or interest on the exchanged notes (or a portion thereof) will be extinguished. In case of a "Go" decision only with respect to jet fuel, the parties would perform 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, and 30% of the outstanding notes would be cancelled. If Total makes a "No-Go" decision, all the outstanding notes would remain outstanding and become payable upon maturity (unless otherwise converted in accordance with their terms).

In April 2014, we entered into a letter agreement with Total dated as of March 29, 2014 (or the March 2014 Total Letter Agreement) to amend the Amended and Restated Master Framework Agreement entered into as of December 2, 2013 (included as part of documents entered into in connection with the Total joint venture). Under the March 2014 Total Letter Agreement, we agreed to, among other things, amend the conversion price of the then-remaining $21.7 million of convertible notes from $7.0682 per share to $4.11 per share (which was funded in two equal installments in July 2014 and January 2015). In May 2014, we obtained stockholder approval with respect to the repricing of such convertible notes and the other amendments contemplated by the March 2014 Letter Agreement.

Sales and Revenues

To commercialize our initial Biofene-derived product, squalane, in the cosmetics sector for use as an emollient, we have entered into certain 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. Pursuant to our agreements with Total, future commercialization of our diesel and jet fuel products outside of Brazil would generally occur exclusively through certain agreements entered into by and among Amyris, Total and Total Amyris BioSolutions B.V. (or JVCO). 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. In the third quarter and fourth quarter we sold to one of our collaboration partners, a product for the flavors and fragrances market that we began manufacturing at our Brotas facility in Brazil. This product constituted approximately 35% of our total product revenues for the year.

Financing

In 2014, we completed multiple financings involving loans, convertible debt and equity offerings.

In January 2014, we sold and issued, for face value, approximately $34.0 million of convertible promissory notes in Tranche II Notes as described in more detail in Note 5, "Debt"

In March 2014, we entered into a securities purchase agreement with Kuraray under which we agreed to sell shares of our 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. In April 2014, we completed the sale of common stock to Kuraray and issued 943,396 shares of our common stock at a price per share of $4.24 for aggregate proceeds of approximately $4.0 million.

In March 2014, the Company entered into an export financing agreement with Banco ABC Brasil S.A. (or ABC) for approximately $2.2 million to fund exports through March 2015. This loan is collateralized by future exports from the

Company's subsidiary in Brazil.

In March 2014 we entered into a Loan and Security Agreement (or, as amended, the Hercules Loan Facility) with Hercules Technology Growth Capital, Inc. (or Hercules) under which we issued to Hercules, secured debt in the aggregate amount of $25.0 million. In June 2014, we entered into a First Amendment of the Loan and Security Agreement and agreed to, among other things, issue an additional $5.0 million of secured debt to Hercules. The Hercules Loan Facility is described in more detail below under "Liquidity and Capital Resources."

In May 2014, we sold and issued $75.0 million aggregate principal amount of 6.50% Convertible Senior Notes due 2019 to Morgan Stanley & Co. LLC as the Initial Purchaser in a private placement, and for initial resale by the Initial Purchaser to qualified institutional buyers in the 144A Offering (as described in more detail below under "Liquidity and Capital Resources"). These notes were issued at a discount of $3.0 million.

In July 2014, we closed on the initial installment of the $21.7 million in convertible notes from Total under the July 2012 Agreements as described in more detail in Note 5, "Debt", in the amount of $10.85 million and in January 2015, we closed on the second installment in the amount of $10.85 million.

Liquidity

We have incurred significant losses since our inception and we believe that we will continue to incur losses and may have negative cash flow from operations into at least 2016. As of December 31, 2014, we had an accumulated deficit of $819.2 million and had cash, cash equivalents and short term investments of $43.4 million. We have significant outstanding debt and contractual obligations related to capital and operating leases, as well as purchase commitments. Refer to "Liquidity and Capital Resources" for further details.

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 renewable products, from the delivery of collaborative 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 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, and in the latter part of 2013 we initiated sales of flavors and fragrances related 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 collectability 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.

Variable Interest Entities

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.

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 flows attributable to a long-lived asset over its estimated remaining useful life. Although we believe that the assumptions and estimates that we have are reasonable and appropriate, different assumptions and estimates could materially impact our reported financial results.

Inventories

Inventories, which consist of farnesene-derived products and flavor and fragrances ingredients are stated at the lower of cost or market and categorized as finished goods, work-in-process or raw material inventories. We evaluate the recoverability of our inventories based on assumptions about expected demand and net realizable value. If we

determine that the cost of inventories exceeds its estimated net realizable value, we record 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 our operating results. If actual net realizable values are more favorable 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. Cost is computed on a first-in, first-out basis. Inventory costs are incurred in bringing inventory to its existing location.

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. 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.

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.

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 discounted future cash flows of the technology over the estimated useful life of the technology, 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.

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.

See Note 11, "Stock-Based Compensation Plans" of Notes to Consolidated Financial Statements in Part II, Item 8 of this Report for a description of our stock-based compensation plans and more information on the assumptions used to calculate the fair value of stock-based compensation.

Income Taxes

We are subject to income taxes in 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 unless it is more likely than not that they will be realized. This assessment requires judgment as to the likelihood and amounts of future taxable income by tax jurisdiction.

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 and down round conversion, that requires cash payment for forgone interest upon a change of control and down round conversion price adjustment provisions.

See Note 3, "Fair Value of Financial Instruments" of Notes to Consolidated Financial Statements in Part II, Item 8 of this Report for a description of our embedded derivatives related to convertible notes and information on the valuation models used to calculate the fair value of embedded derivatives. Changes in the inputs into these valuation models may have a significant impact on 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 derivatives are primarily related to the change in price of the underlying common stock of the Company and is reflected in our consolidated statements of operations as "Gain (loss) from change in fair value of derivative instruments."

Results of Operations

Comparison of Year Ended December 31, 2014 to Year Ended December 31, 2013

Revenues

	Years Ended December 31,		Year-to Year Change	Percentage Change
	2014	2013		
	(Dollars in thousands)			
Revenues				
Renewable product sales	$22,793	$14,428	$8,365	58 %
Related party renewable product sales	646	1,380	(734)	(53)%
Total product sales	$23,439	$15,808	7,631	48 %
Grants and collaborations revenue	19,835	22,664	(2,829)	(12)%
Related party grants and collaborations revenue	—	2,647	(2,647)	(100)%

Total grants and collaborations revenue	19,835	25,311	(5,476)	(22)%
Total revenues	$43,274	$41,119	$2,155	5 %

Our total revenues increased by $2.2 million to $43.3 million in 2014 as compared to the prior year due to increased revenues from product sales, offset by a decrease in grants and collaborations revenue.

Product sales increased by $7.6 million to $23.4 million in 2014 as compared to the prior year resulting primarily from the sales of a flavors and fragrances product of $7.9 million. Sales of our emollients products containing squalane increased by $1.8 million driven by volume increases to new and existing customers. These increases were offset by a decrease in sales of farnesane and farnesene-derived products of $2.1 million.

Grants and collaborations revenue decreased by $5.5 million to $19.8 million in 2014 compared to the prior year. This is due to a $4.9 million decrease in government grants revenue, a $2.0 million increase in non-related party collaborations revenue and a $2.6 million decrease in related party collaborations revenue. The decline in government grants by $4.9 million, includes a decrease of $2.1 million in government grants revenue from the National Renewable Energy Lab as a result of the project being completed during 2013, and a decrease of $2.5 million in government grants revenue under the DARPA Technology Investment Agreement due to the timing of the project's revenue milestone. The decrease was reduced by the net increase in collaborations revenue from non-related parties of $2.0 million. Collaborations revenue from non-related parties included increases of $5.5 million, including $2.0 million from achievement of the first performance milestone related to a flavors and fragrances product, a $1.1 million increase in collaborations revenue from existing collaborations and a $2.4 million increase in collaborations revenue from new collaborations. These increases were offset by a decrease of $3.5 million related to the completion of the first phase of a collaboration in 2013 (the collaboration funding was recognized from the achievement of technical milestones), net of lower collaborations revenue earned from the second phase of the collaboration in 2014 (a cost sharing development agreement recognized on a straight line basis). In addition, related party collaborations revenue decreased by $2.6 million as a result of research and development activities performed on behalf of Novvi in 2013 that did not continue in 2014.

Cost and Operating Expenses

	Years Ended December 31,		Year-to Year Change	Percentage Change
	2014	2013		
	(Dollars in thousands)			
Cost of products sold	$33,202	$38,253	$(5,051)	(13)%
Loss on purchase commitments and write-off of property, plant and equipment	1,769	9,366	(7,597)	(81)%
Impairment of intangible assets	3,035	—	3,035	nm
Research and development	49,661	56,065	(6,404)	(11)%
Sales, general and administrative	55,435	57,051	(1,616)	(3)%
Total cost and operating expenses	$143,102	$160,735	$(17,633)	(11)%

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Cost of Products Sold

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 of cost or market inventory valuations, and costs related to scale-up in production of such products. Our cost of products sold decreased by $5.1 million to $33.2 million in 2014 as compared to the prior year. The decrease was mainly due to lower cost of production and a decline in lower of cost or market adjustments as a result of higher production volumes and overall manufacturing cost reduction efforts. Our farnesene cash production costs per liter, have steadily declined since the commencement of production at our manufacturing facility in Brotas, Brazil, consistent with increases in volume and production efficiency, resulting in a decline of approximately one half, as of our latest production runs in November 2014 compared to those produced in December 2013. We expect the downward trend in cash production costs per liter to continue as we continually improve strains, operational efficiency and/or increase volumes. Cash production costs per liter, a non-GAAP measure, includes costs of feedstock, nutrients and other chemical ingredients, labor, utilities and other plant overhead. Cost of products sold includes depreciation and amortization expenses of $5.7 million in 2014 compared to $6.1 million in 2013.

Cost of Products Sold Associated with Loss on Purchase Commitments and Write-Off of Property, Plant and Equipment

The loss on purchase commitments and write-off of property, plant and equipment decreased by $7.6 million to $1.8 million in 2014 as compared to the prior year. The decrease was mainly due to a charge related to the termination and settlement of our agreement with Tate & Lyle Ingredients Americas, Inc. (or Tate & Lyle), one of our contract manufacturers, in 2013.

Impairment of Intangible Assets

The loss on impairment of intangible assets of $3.0 million was a result of the impairment of in-process research and development assets related to the 2011 acquisition of Draths Corporation (or Draths).

Research and Development Expenses

Our research and development expenses decreased by $6.4 million in 2014 as compared to the prior year, primarily as a result of our overall cost reduction efforts and lower spending to manage our operating costs. The decreases were attributable to a $2.8 million reduction in personnel-related expenses and lower stock-based compensation expense, a $0.5 million decrease in laboratory supplies, $1.2 million decrease in depreciation and amortization expenses and a $1.7 million decrease in other overhead expenses. Research and development expenses includes stock-based compensation expense of $3.5 million in 2014 compared to $4.3 million in 2013 and depreciation and amortization expenses of $7.7 million in 2014 compared to $8.9 million in 2013.

Sales, General and Administrative Expenses

Our sales, general and administrative expenses decreased by $1.6 million to $55.4 million in 2014 as compared to the prior year, primarily as a result of our overall cost reduction efforts and lower spending to manage our operating costs. The decrease was attributable to a $4.2 million reduction in personnel-related expenses and lower stock-based compensation expense, offset by a $0.3 million increase in recruiting and relocation and a $2.2 million increase in other overhead expenses. Sales, general and administrative expenses includes stock-based compensation expense of $10.6 million in 2014 compared to $13.8 million 2013 and depreciation and amortization expenses of $1.5 million in 2014 compared to $1.7 million in 2013.

Other Income (Expense)

	Years Ended December 31,		Year-to Year Change	Percentage Change
	2014	2013		
	(Dollars in thousands)			
Other income (expense):				
Interest income	$387	$162	$225	139 %
Interest expense	(28,949)	(9,107)	(19,842)	218 %
Gain (loss) from change in fair value of derivative instruments	144,138	(84,726)	228,864	(270)%
Loss from extinguishment of debt	(10,512)	(19,914)	9,402	(47)%
Other income (expense), net	336	(2,553)	2,889	(113)%
Total other income (expense)	$105,400	$(116,138)	$221,538	(191)%

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Total other income increased by approximately $221.5 million to $105.4 million in 2014 as compared to the prior year. The increase was primarily attributable to the change in fair value of derivative instruments of $228.9 million, attributed to the compound embedded derivative liabilities associated with our senior secured convertible promissory notes and the change in fair value of our interest rate swap derivative liability. The change was driven by fluctuation of various inputs used in the valuation models from one reporting period to another, such as stock price, credit risk rate and estimated stock volatility.

The decrease in loss from the extinguishment of debt was due to the loss of $10.5 million in 2014 related to Total's conversion of a portion of their outstanding notes issued under the collaboration agreements with Total into the Tranche II Notes (as defined and described below under "Liquidity and Capital Resources") and loss from extinguishment of Total convertible notes in connection with the 144A Offering, compared to the $19.9 million in loss on extinguishment of debt recorded in 2013 related to the Temasek Bridge Loan and Total convertible notes. Finally,

the increase in other income, net, of $2.9 million was primarily due to an increase in unrealized gain on foreign currency translation due to the appreciation of the U.S. dollar versus the Brazilian real. The increase was offset by an increase in interest expense of $19.8 million associated with increased borrowings to fund our operations.

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

Revenues

	Years Ended December 31,		Year-to Year Change	Percentage Change
	2013	2012		
	(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)%

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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 in 2013 as compared to the prior year resulting primarily from the transition out of the ethanol and ethanol-blended gasoline business during the third quarter of 2012. 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 by $1.3 million to $25.3 million in 2013 as compared to the prior year primarily due from 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,		Year-to Year Change	Percentage Change
	2013	2012		
	(Dollars in thousands)			
Cost of products sold	$38,253	$77,314	$(39,061)	(51)%
Loss on purchase commitments and write-off of property, plant and equipment	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 as compared to the prior year. 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 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 includes depreciation and amortization expenses of $6.1 million in 2013 compared to $2.9 million in 2012 mainly from significant additions to property, plant and equipment in 2013 and the latter part of 2012.

Cost of Products Sold Associated with Loss on Purchase Commitments and Write-Off of Property, Plant and Equipment

The loss on purchase commitments and write-off of property, plant and equipment decreased by $36.5 million to $9.4 million in 2013 as 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 an 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 to manage our operating costs. 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 includes stock-based compensation expense of $4.3 million in 2013 compared to $6.5 million in 2012 and depreciation and amortization expenses of $8.9 million in 2013 compared to $6.3 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 to manage our operating costs. The decreases were attributable to a $14.5 million reduction in personnel-related expenses including 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 includes stock-based compensation expense of $13.8 million in 2013 compared to $21.0 million in 2012 and depreciation and amortization expenses of $1.7 million in 2013 compared to $5.4 million in 2012.

Other Income (Expense)

	Years Ended December 31,	Year-to Year	Percentage

	2013	2012	Change	Change
	(Dollars in thousands)			
Other income (expense):				
Interest income	$162	$1,472	$(1,310)	(89)%
Interest expense	(9,107)	(4,926)	(4,181)	85 %
Gain (loss) from change in fair value of derivative instruments	(84,726)	1,790	(86,516)	nm
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

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nm= not meaningful

Total other expenses increased by approximately $112.9 million to $116.1 million in 2013 as 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, which increase was 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 and the change in fair value of our 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.

Liquidity and Capital Resources

	December 31,	
	2014	2013
	(Dollars in thousands)	
Working capital (deficit), excluding cash and cash equivalents	$(8,441)	$(7,250)
Cash and cash equivalents and short-term investments	$43,422	$8,296
Debt and capital lease obligations	$233,277	$153,305
Accumulated deficit	$(819,152)	$(821,438)

	Years Ended December 31,		
	2014	2013	2012
	(Dollars in thousands)		
Net cash used in operating activities	$(84,708)	(105,859)	$(150,872)
Net cash provided by (used in) investing activities	(9,831)	(10,337)	(49,644)
Net cash provided by financing activities	130,921	91,181	138,117

Working Capital. Our working deficit, excluding cash and cash equivalents was $8.4 million for the year ended December 31, 2014, which represents an increase of $1.2 million compared to the working capital deficit of $7.3 million for the year ended December 31, 2013. The increase of $1.2 million in the working capital deficit during 2014 was due to the decrease in prepaid expenses and other current assets of $3.0 million, increase in deferred revenue of $3.1 million and an increase in the current portion of debt of $10.7 million, offset by an increase in accounts receivable of $1.0 million, increase in inventory of $3.6 million and a decrease in accounts payable, accrued and other current liabilities and current portion of capital lease obligations of $11.1 million.

The increase in cash and cash equivalents and short-term investments of $35.1 million was primarily due to cash provided by financing activities of $130.9 million related principally to the closing of the second tranche of our convertible promissory note offering under the August 2013 SPA of $28.0 million, net of $6.0 million convertible promissory note issued to Total in exchange for cancellation of previously outstanding convertible promissory notes, borrowings under the Hercules Loan Facility of $29.8 million, the closing of our 144A Offering for $72.0 million (net of payments of discount and expenses of $3.0 million), $10.9 million proceeds from issuance of convertible notes to Total under the July 2012 Agreements, export financing with ABC of $2.2 million, and $4.0 million in proceeds from the sale of common stock to Kuraray, offset by the extinguishment of $9.7 million of debt to Total and $6.8 million in payments for debt obligations and capital leases. The cash received from financing activities was reduced by cash usage to fund our operating activities of $84.7 million, cash invested in an affiliate of $2.1 million, loans made to an

affiliate of $2.8 million, purchase of property plant and equipment of $5.0 million and the effect of foreign exchange rate losses on cash and cash equivalents of $1.2 million.

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 and equity 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 we may also require 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 2015 working capital needs and our planned operating and capital expenditures for 2015 are dependent on significant inflows of cash from renewable product revenues, existing collaboration partners and from funds under existing equity 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.

Liquidity. We have incurred significant losses since our inception and we believe that we will continue to incur losses and may have negative cash flow from operations into at least 2016. As of December 31, 2014, we had an accumulated deficit of $819.2 million and had cash, cash equivalents and short term investments of $43.4 million. We have significant outstanding debt and contractual obligations related to capital and operating leases, as well as purchase commitments.

As of December 31, 2014, our debt totaled to $312.7 million, of which $17.1 million matures within the next twelve months. In addition to upcoming debt maturities, our debt service obligations over the next twelve months are significant, including $9.5 million of anticipated interest payments. Our debt agreements also contain various covenants, including restrictions on our business that could cause us to be at risk of defaults, such as the requirement to maintain unrestricted, unencumbered cash in an amount equal to at least 50% of the principal amount outstanding under the Hercules Loan Facility. Refer to Note 5, "Debt" and Note 6, “Commitments and Contingencies” for further details of our debt arrangements.

Our operating plan for 2015 contemplates a significant reduction in our 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 2014, (iii) increased cash inflows from collaborations compared to 2014, (iv) maintaining operating expenses at levels compared to 2014, and (v) access to the various financing commitments (see Note 16, "Subsequent Events").

If we are unable to generate sufficient cash contributions from product sales, payments from existing and new collaboration partners, and draw sufficient funds from certain financing commitments due to contractual restrictions and covenants, we will need to obtain additional funding from equity or debt financings, agree to burdensome 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.

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 2015 to support our liquidity needs through the remainder of 2015 and into 2016:

- Effect significant headcount reductions, particularly with respect to employees not connected to critical or contracted activities across all functions of the Company, including employees involved in general and administrative, research and development, and production activities.

- Shift focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.

- Reduce production activity at our Brotas facility to levels only sufficient to satisfy volumes required for product revenues forecast from existing products and customers.

- Reduce expenditures for third party contractors, including consultants, professional advisors and other vendors.

- Reduce or delay uncommitted capital expenditures, including non-essential facility and lab equipment, and information technology projects.

- Closely monitor our working capital position with customers and suppliers, as well as suspend operations at pilot plants and demonstration facilities.

The contingency cash plan contemplating these actions is designed to save us an estimated $30.0 million to $40.0 million over the period through March 31, 2016.

Implementing this plan could have a negative impact on our ability to continue our business as currently contemplated, including, without limitation, delays or failures in our 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 an 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 2014, we received an additional $10.0 million of funding under a collaboration agreement with a flavors and fragrances partner. In July 2014, we received $10.85 million in additional research and development funding from Total through the issuance of a 1.5% Senior Secured Convertible Note to Total as described above under “Overview - Total Relationship". This amount was the initial installment of the third closing under the Total Purchase Agreement. We received additional collaboration funding from various other partners during 2014, including $2.0 million in July 2014 under an isoprene collaboration with Manufacture Francaise de Pnematiques Michelin (or Michelin) and Braskem, S.A. (or Braskem) and $2.0 million in April 2014 under a farnesene collaboration with Kuraray (see Note 8, “Significant Agreements”).

We depend on collaboration funding to support our research and development and operating expenses. While part of this funding is committed based on existing collaboration agreements, we will be required to identify and obtain funding from additional collaborations. 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, 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.

Government Contracts. In August 2010, we were appointed as a subcontractor to National Renewable Energy Laboratory (or NREL) under a DOE grant awarded to NREL. Under this contract, we have the right to be reimbursed for up to $3.6 million of research and development expenses, and are required to fund an additional $1.4 million in cost sharing expenses. As of December 31, 2013, we had recognized the entire $3.6 million in revenue under this grant. The total cash received under this grant as of December 31, 2014 was $3.6 million, of which $0.2 million was received during the year ended December 31, 2014.

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 and extended in July 2014. Through

December 31, 2014, we had recognized $7.7 million in revenue under this agreement, of which $2.4 million was recognized during the year ended December 31, 2014. Total cash received under this agreement as of December 31, 2014 was $7.6 million, of which $4.5 million was received during the year ended December 31, 2014.

In May 2014, we entered into a subcontract with a Lawrence Berkeley National Laboratory a DARPA-funded bio-fabrication program. The subcontract was for $0.6 million, and was completed as of September 30, 2014. For the year ended December 31, 2014, we recognized $0.6 million in revenue under this agreement.

Convertible Note Offerings. In February 2012, we sold $25.0 million in principal amount of senior unsecured convertible promissory notes due March 1, 2017 as described in more detail in Note 5, "Debt."

In July and September 2012, we issued $53.3 million worth of 1.5% Senior Unsecured Convertible Notes to Total under the July 2012 Agreements for an aggregate of $30.0 million in cash proceeds and our repayment of $23.3 million in previously-provided research and development funds pursuant to the Total Purchase Agreement (as described in more detail under "Related

Party Convertible Notes" in Note 5, "Debt." As part of the December 2012 private placement, we issued 1,677,852 shares of our common stock in exchange for the cancellation of $5.0 million worth of an outstanding senior unsecured convertible promissory note held by Total.

In June 2013, we sold and issued a 1.5% Senior Unsecured Convertible Note to Total with a principal amount of $10.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement. In July 2013, we sold and issued a 1.5% Senior Unsecured Convertible Note to Total with a principal amount of $20.0 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement.

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 as described in more detail in Note 5, "Debt" (such agreement referred to as the August 2013 SPA and such financing 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). 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.

In October 2013, we sold and issued a senior secured promissory note to Temasek for a bridge loan of $35.0 million (or the Temasek Bridge Note). 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 Temasek Bridge 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 certain entities affiliated with FMR LLC (or the Fidelity Entities) in the first tranche closing (participating for a 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 amended the August 2013 SPA to sell $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, pursuant to that amendment, we sold 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). The closing of the sale of such Tranche II Notes under the December amendment to the August 2013 SPA occurred in January 2014. The August 2013 Financing is more fully described in Note 5, "Debt."

In December 2013, in connection with our entry into agreements establishing our joint venture with Total, we exchanged the $69.0 million of the then-outstanding Total unsecured convertible notes issued pursuant to the Total Purchase Agreement for replacement 1.5% Senior Secured Convertible Notes, in principal amounts equal to the principal amount of the cancelled notes.

In the 144A Offering in May 2014, we sold and issued $75.0 million in aggregate principal amount of 6.5% Convertible Senior Notes due 2019 to Morgan Stanley & Co. LLC as the Initial Purchaser in a private placement, and for initial resale by the Initial Purchaser to qualified institutional buyers pursuant to Rule 144A of the Securities Act. The 144A Offering is described in more detail in Note 5, "Debt."

In each of July 2014 and January 2015, we sold and issued a 1.5% Senior Secured Convertible Note to Total pursuant to the Total Purchase Agreement. The aggregate principal amount of these two notes was $21.7 million and each of such notes has a March 1, 2017 maturity date.

Export Financing with ABC Brasil. In March 2013, we entered into an export financing agreement with ABC for approximately $2.5 million to fund exports through March 2014. This loan was collateralized by future exports from our Brazilian subsidiary. As of December 31, 2014 and 2013, the principal amount outstanding under this agreement was zero and $2.5 million,

respectively. In March 2014, we entered into an additional export financing agreement with ABC for approximately $2.2 million to fund exports through March 2015. This loan is collateralized by future exports from our Brazilian subsidiary. As of December 31, 2014, the principal amount outstanding under this agreement was $2.2 million. We are also a parent guarantor for the payment of the outstanding balance under these loan agreements.

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$19.6 million based on the exchange rate as of December 31, 2014) 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 provided a parent guarantee 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 (or the BNDES Credit Facility) to finance a production site in Brazil. The BNDES Credit Facility was for R$22.4 million (approximately US$8.4 million based on the exchange rate as of December 31, 2014). 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. As of December 31, 2014 and 2013, the Company had R$11.5 million (approximately US$4.3 million based on the exchange rate as of December 31, 2014) and R$15.3 million (approximately US$6.5 million based on the exchange rate as of December 31, 2013), respectively, in outstanding advances under the BNDES Credit Facility.

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 are due on a monthly basis together with principal payments. The loaned amounts carry interest of 7% per year. 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 first priority security interest in certain of our equipment and other tangible assets totaling R$24.9 million (approximately US$9.4 million based on the exchange rate as of December 31, 2014). 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.

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 (or the FINEP Credit Facility) to finance a research and development project on sugarcane-based biodiesel (or the FINEP Project). The FINEP Credit Facility provided for loans of up to an aggregate principal amount of R$6.4 million (approximately

US$2.4 million based on the exchange rate as of December 31, 2014) which are secured by a chattel mortgage on certain equipment of Amyris Brasil as well as by bank letters of guarantee. All available credit under this facility is fully drawn. As of December 31, 2014, the total outstanding loan balance under this credit facility was R$4.3 million (approximately $1.6 million based on the exchange rate as of December 31, 2014).

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.

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$5.5 million based on the exchange rate as of December 31, 2014) of which R$11.1 million was contributed prior to the release of the second disbursement. All four disbursements were completed and we have 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$1.2 million based on the exchange rate as of December 31, 2014) before receiving the second installment in December 2012. We obtained the bank letters of guarantee from ABC; and
- Amounts disbursed under the FINEP Credit Facility were required to be used towards the FINEP Project within 30 months after the contract execution.

Hercules Loan Facility. In March 2014, we entered into the Hercules Loan Facility to make available a loan in the aggregate principal amount of up to $25.0 million. The original Hercules Loan Facility 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%. We may repay the loaned amounts before the maturity date (generally February 1, 2017) if we pay an additional fee of 3% of the outstanding loans (1% if after the initial twelve-month period of the loan). We were also required to pay a 1% facility charge at the closing of the transaction, and are required to pay a 10% end of term charge. In connection with the original Hercules Loan Facility, Amyris agreed to certain customary representations and warranties and covenants, as well as certain covenants that were subsequently amended (as described below). The total available credit of $25.0 million under this facility was fully drawn down.

In June 2014, we entered into a first amendment (or the Hercules Amendment) of the Hercules Loan Facility. Pursuant to the Hercules Amendment, the parties agreed to adjust the term loan maturity date from May 31, 2015 to February 1, 2017 and removed (i) a requirement for us to pay a forbearance fee of $10.0 million in the event certain covenants were not satisfied, (ii) a covenant that we maintain positive cash flow commencing with the fiscal quarter beginning October 1, 2014, (iii) a covenant that, beginning with the fiscal quarter beginning July 1, 2014, we and our subsidiaries achieve certain projected cash product revenues and projected cash product gross profits, and (iv) an obligation for us to file a registration statement on Form S-3 with the SEC by no later than June 30, 2014 and complete an equity financing of more than $50.0 million by no later than September 30, 2014. We further agreed to include a new covenant requiring us to maintain unrestricted, unencumbered cash in an amount equal to at least 50% of the principal amount then outstanding under the Hercules Loan Facility and borrow an additional $5.0 million. The additional $5.0 million borrowing was completed in June 2014, and accrues interest at a rate per annum equal to the greater of either the prime rate reported in the Wall Street Journal plus 5.25% or 8.5%. The Hercules Loan Facility is secured by liens on our assets, including on certain of our intellectual property. The Hercules Loan Facility includes customary events of default, including failure to pay amounts due, breaches of covenants and warranties, material adverse effect events, certain cross defaults and judgments, and insolvency. If an event of default occurs, Hercules may require immediate repayment of all amounts due. As of December 31, 2014, $29.8 million was outstanding under the Hercules Loan Facility, net of discount of $0.2 million, and we maintain cash in excess of the approximately $15.0 million current minimum cash covenant described above.

Common Stock Offerings. 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 was received in January 2013. Of the 14,177,849 shares issued in the private placement, 1,677,852 of such shares were issued to Total in exchange for the cancellation of $5.0 million 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 Investment SA (or 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 completed a private placement of 943,396 shares of our common stock to Kuraray for aggregate proceeds of $4.0 million.

Cash Flows during the Years Ended December 31, 2014, 2013, and 2012

Cash Flows from Operating Activities

Our primary uses of cash from operating activities are costs related to production and sales of our products and personnel-related expenditures, offset by cash received from product sales, grants and collaborations. Cash used in operating activities was $84.7 million, $105.9 million and $150.9 million for the years ended December 31, 2014, 2013 and 2012, respectively.

Net cash used in operating activities of $84.7 million for the year ended December 31, 2014 was attributable to our net loss of $84.5 million excluding non-cash net income of $86.7 million, and a $0.2 million outflow from net changes in our operating assets and liabilities. Non-cash income of $86.7 million consisted primarily of a $144.1 million gain from 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, offset by $15.0 million of depreciation and amortization expenses, $14.1 million of stock-based compensation, $10.0 million of amortization of debt discount, $10.5 million loss associated with the extinguishment of convertible debt, $2.0 million loss on purchase commitments and write-off and disposal of property, plant and equipment, $2.9 million loss from investment in affiliate from our joint venture with Novvi and $3.0 million loss on impairment of IPR&D related to Draths. Net outflow from changes in operating assets and liabilities of $0.2 million primarily consisted of a $1.2 million increase in accounts receivable and related party accounts receivable, a $2.9 million increase in prepaid expenses and other assets, a $4.5 million increase in inventory as a result of the decrease in the allowance for lower of cost or market and a $3.2 million decrease in accounts payable, offset by a $6.8 million increase in accrued and other liabilities mainly due to an increase in accrued interest from new debt and a $4.8 million increase in deferred revenue from the collaboration agreement with Braskem and Michelin.

Net cash used in operating activities of $105.9 million for the year ended December 31, 2013 was attributable to our net loss of $234.9 million and a $23.7 million net outflow from changes in our operating assets and liabilities, offset by non-cash charges of $152.8 million. Net outflow from changes 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 the first quarter of 2014, a $2.7 million increase in prepaid expenses and other assets, a $9.4 million decrease in accrued and other 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 loss from 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 property, plant and equipment related to a termination and settlement of our existing agreement with Tate & Lyle and Antibioticos.

Net cash used in operating activities of $150.9 million for the year ended December 31, 2012 was attributable to our net loss of $206.0 million and a $33.5 million net outflow from changes in our operating assets and liabilities, offset by non-cash charges of $88.7 million. The net outflow from changes in operating assets and liabilities of $33.5 million primarily consisted of a $35.8 million decrease in accrued and other liabilities, an $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 property, plant and equipment at contract manufacturers, $27.5 million of stock-based compensation and $14.6 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 $9.8 million for the year ended December 31, 2014, was a result of $5.0 million of capital expenditures mainly due to maintenance and upgrades of our facility in Brotas, Brazil and $4.9 million loans and investment in our joint venture with Novvi ($2.8 million in loans and $2.1 million in equity).

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.

Cash Flows from Financing Activities

Net cash provided by financing activities of $130.9 million for the year ended December 31, 2014, was a result of the net receipt of $139.5 million from debt and equity financing, which related to the closing of the second tranche of our convertible promissory note offering under the August 2013 SPA of $28.0 million, net of $6.0 million convertible promissory note issued to Total in exchange for cancellation of previously outstanding convertible promissory notes, borrowings under the Hercules Loan Facility of $29.8 million, the closing of our 144A Offering for approximately $72.0 million proceeds (net of payments of discount and expenses of $3.0 million), the sale of $10.9 million convertible notes under the July 2012 Agreements, $2.2 million from an export financing agreement with ABC and $4.7 million in proceeds from issuance of common stock, $4.0 million of which from issuance of common stock to Kuraray, offset by the $9.7 million settlement of convertible notes under the July 2012 Agreements. These cash inflows were offset by other payments of debt principal and capital lease obligations of $6.8 million.

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.

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, 2014 (in thousands):

	Total	2015	2016	2017	2018	2019	Thereafter
Principal payments on long-term debt	$312,700	$17,100	$20,973	$96,474	$60,236	$111,595	$6,322
Interest payments on long-term debt, fixed rate[(1)]	88,004	9,482	7,800	12,946	33,321	23,997	458
Operating leases	58,613	6,694	6,564	6,565	6,653	6,791	25,346

Principal payments on capital leases	816	541	250	25	—	—	—
Interest payments on capital leases	54	39	15	—	—	—	—
Terminal storage costs	102	102	—	—	—	—	—
Purchase obligations[2]	2,871	1,407	442	985	37	—	—
Total	$463,160	$35,365	$36,044	$116,995	$100,247	$142,383	$32,126

(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 $1.6 million, of which zero have been accrued as loss on purchase commitments.

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 (including embedded derivatives therein). 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, 2014, 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, we do not believe that an immediate 10% increase in interest rates would have a material effect on the fair value of our portfolio. Since we believe we have the ability to liquidate this portfolio, we do not expect our operating results or cash flows to be materially affected to any significant degree by a sudden change in market interest rates on our investment portfolio. Additionally, as of December 31, 2014, 100% of our outstanding debt is in fixed rate instruments or instruments which have capped rates. Therefore, our exposure to the impact of variable interest rates is limited. Changes in interest rates may significantly change the fair value of our embedded derivative liabilities.

Foreign Currency Risk

Most of our sales contracts are denominated in U.S. dollars and, therefore, our revenues are not currently subject to significant foreign currency risk. The functional currency of our consolidated subsidiaries 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 subsidiaries and translated into U.S. dollars using the year end exchange rate is $134.4 million at December 31, 2014 and $145.2 million at December 31, 2013. The decrease in the permanent investments in our foreign subsidiaries between 2013 and 2014 is due to the appreciation of the U.S. dollar versus the Brazilian real, offset by the additional capital contributions made and decrease in accumulated deficit of our wholly-owned consolidated subsidiary in Brazil. The potential loss in foreign exchange translation, which would be recognized in Other Comprehensive Income (Loss), resulting from a hypothetical 10% adverse change in quoted Brazilian real exchange rates is $13.4 million and $14.5 million for 2014 and 2013, 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$8.3 million based on the exchange rate as of December 31, 2014). 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 foreign exchange rate exposure on the debt between the U.S. dollar and Brazilian real.

We analyzed our foreign currency exposure, to identify assets and liabilities denominated in other currencies. For those assets and liabilities, we evaluated the effects of a 10% shift in exchange rates between those currencies and the U.S. dollar. We have determined that there would be an immaterial effect on our results of operations from such a shift.

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.
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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, 2014 and December 31, 2013, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014 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, 2014, based on criteria established in Internal Control - Integrated Framework (2013) 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
March 31, 2015

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

	December 31, 2014	2013
Assets		
Current assets:		
Cash and cash equivalents	$42,047	$6,868
Short-term investments	1,375	1,428
Accounts receivable, net of allowance of $479 and $479, respectively	8,687	7,734
Related party accounts receivable	455	484
Inventories, net	14,506	10,888
Prepaid expenses and other current assets	6,534	9,518
Total current assets	73,604	36,920
Property, plant and equipment, net	118,980	140,591
Restricted cash	1,619	1,648
Equity and loans in affiliates	2,260	68
Other assets	13,635	10,517
Goodwill and intangible assets	6,085	9,120
Total assets	$216,183	$198,864
Liabilities and Deficit		
Current liabilities:		
Accounts payable	$3,489	$6,512
Deferred revenue	5,303	2,222
Accrued and other current liabilities	13,565	21,221
Capital lease obligation, current portion	541	956
Debt, current portion	17,100	6,391
Total current liabilities	39,998	37,302
Capital lease obligation, net of current portion	275	287
Long-term debt, net of current portion	100,122	56,172
Related party debt	115,239	89,499
Deferred rent, net of current portion	10,250	10,191
Deferred revenue, net of current portion	6,539	5,000
Derivative liabilities	59,736	134,717
Other liabilities	9,087	1,544
Total liabilities	341,246	334,712
Commitments and contingencies (Note 6)		
Stockholders' deficit:		
Preferred stock - $0.0001 par value, 5,000,000 shares authorized, none issued and outstanding	—	—
Common stock - $0.0001 par value, 300,000,000 and 200,000,000 shares authorized as of December 31, 2014 and 2013; 79,221,883 and 76,662,812 shares issued and outstanding as of December 31, 2014 and 2013, respectively	8	8
Additional paid-in capital	724,669	706,253
Accumulated other comprehensive loss	(29,977)	(20,087)
Accumulated deficit	(819,152)	(821,438)
Total Amyris, Inc. stockholders' deficit	(124,452)	(135,264)
Noncontrolling interest	(611)	(584)

Total stockholders' deficit	(125,063)	(135,848)
Total liabilities and stockholders' deficit	$216,183	$198,864

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,		
	2014	2013	2012
Revenues			
Renewable product sales	$22,793	$14,428	$10,802
Related party renewable product sales	646	1,380	—
Ethanol and ethanol-blended gasoline	—	—	38,836
Total product sales	23,439	15,808	49,638
Grants and collaborations revenue	19,835	22,664	14,281
Related party grants and collaborations revenue	—	2,647	9,775
Total grants and collaborations revenue	19,835	25,311	24,056
Total revenues	43,274	41,119	73,694
Cost and operating expenses			
Cost of products sold	33,202	38,253	77,314
Loss on purchase commitments and write-off of property, plant and equipment	1,769	9,366	45,854
Impairment of intangible assets	3,035	—	—
Research and development	49,661	56,065	73,630
Sales, general and administrative	55,435	57,051	78,718
Total cost and operating expenses	143,102	160,735	275,516
Loss from operations	(99,828)	(119,616)	(201,822)
Other income (expense):			
Interest income	387	162	1,472
Interest expense	(28,949)	(9,107)	(4,926)
Gain (loss) from change in fair value of derivative instruments	144,138	(84,726)	1,790
Loss from extinguishment of debt	(10,512)	(19,914)	(920)
Other income (expense), net	336	(2,553)	(646)
Total other income (expense)	105,400	(116,138)	(3,230)
Income (loss) before income taxes and loss from investments in affiliates	5,572	(235,754)	(205,052)
Benefit (provision) for income taxes	(495)	847	(981)
Net income (loss) before loss from investments in affiliates	5,077	(234,907)	(206,033)
Loss from investments in affiliates	(2,910)	—	—
Net income (loss)	2,167	(234,907)	(206,033)
Net (income) loss attributable to noncontrolling interest	119	(204)	894
Net income (loss) attributable to Amyris, Inc. common stockholders	$2,286	$(235,111)	$(205,139)
Net income (loss) per share attributable to common stockholders:			
Basic	$0.03	$(3.12)	$(3.62)
Diluted	$(0.90)	$(3.12)	(3.62)
Weighted-average shares of common stock outstanding used in computing net income (loss) per share of common stock:			
Basic	78,400,098	75,472,770	56,717,869
Diluted	121,859,441	75,472,770	56,717,869

See the accompanying notes to the consolidated financial statements.

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Amyris, Inc.
Consolidated Statements of Comprehensive Loss
(In Thousands)

	Years Ended December 31,		
	2014	2013	2012
Comprehensive loss:			
Net income (loss)	$2,167	$(234,907)	$(206,033)
Foreign currency translation adjustment, net of tax	(9,798)	(7,191)	(6,626)
Total comprehensive loss	(7,631)	(242,098)	(212,659)
Income (loss) attributable to noncontrolling interest	119	(204)	894
Foreign currency translation adjustment attributable to noncontrolling interest	(92)	(89)	(257)
Comprehensive loss attributable to Amyris, Inc.	$(7,604)	$(242,391)	$(212,022)

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		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Noncontrolling Interest	Total Equity
	Shares	Amount					
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
Change in unrealized loss on investments	—	—	—	—		—	—
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

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.
Consolidated Statements of Stockholders' Equity (Deficit)—(Continued)
(In Thousands, Except Share and Per Share Amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Noncontrolling Interest	Total Deficit
	Shares	Amount					
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 Stockholders' Equity (Deficit)—(Continued)
(In Thousands, Except Share and Per Share Amounts)

	Common Stock						
	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Noncontrolling Interest	Total Deficit
December 31, 2013	76,662,812	$ 8	$ 706,253	$ (821,438)	$ (20,087)	$ (584)	$ (135,848)
Issuance of common stock upon exercise of stock options, net of restricted stock	779,490	—	2,133	—	—	—	2,133
Issuance of common stock in a private placement	943,396	—	4,000				4,000
Shares issued from restricted stock unit settlement	836,185	—	(1,822)	—	—	—	(1,822)
Stock-based compensation	—	—	14,105	—	—	—	14,105
Foreign currency translation adjustment, net of tax	—	—	—	—	(9,890)	92	(9,798)
Net income	—	—	—	2,286	—	(119)	2,167
December 31, 2014	79,221,883	$ 8	$ 724,669	$ (819,152)	$ (29,977)	$ (611)	$ (125,063)

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.
Consolidated Statements of Cash Flows
(In Thousands)

	Years Ended December 31,		
	2014	2013	2012
Operating activities			
Net income (loss)	$2,167	$(234,907)	$(206,033)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization	14,969	16,639	14,570
Loss on disposal of property, plant and equipment	263	176	370
Impairment of intangible assets	3,035	—	—
Stock-based compensation	14,105	18,047	27,473
Amortization of debt discount	9,981	3,683	838
Loss from extinguishment of debt	10,512	19,914	920
Provision for doubtful accounts	—	—	236
Loss on purchase commitments and write-off of property, plant and equipment	1,769	9,366	45,854
Change in fair value of derivative instruments	(144,138)	84,726	(1,764)
Loss from investment in affiliate	2,910	—	—
Other non-cash expenses	(113)	211	159
Changes in assets and liabilities:			
Accounts receivable	(1,217)	(4,365)	2,837
Related party accounts receivable	(4)	(484)	—
Inventories, net	(4,481)	(5,612)	2,919
Prepaid expenses and other assets	(2,907)	(2,743)	11,239
Accounts payable	(3,209)	(2,636)	(11,811)
Accrued and other liabilities	6,830	(9,275)	(35,754)
Deferred revenue	4,760	1,634	(1,648)
Deferred rent	60	(233)	(1,277)
Net cash used in operating activities	(84,708)	(105,859)	(150,872)
Investing activities			
Purchase of short-term investments	(1,371)	(2,795)	(8,334)
Maturities of short-term investments	1,409	1,281	—
Sales of short-term investments	—	—	16,503
Change in restricted cash	—	(736)	(955)
Investment in affiliate	(2,075)	—	—
Loan to affiliate	(2,790)	—	—
Purchase of property, plant and equipment, net of disposals	(5,004)	(8,087)	(56,832)
Deposits on property, plant and equipment	—	—	(26)
Net cash used in investing activities	(9,831)	(10,337)	(49,644)
Financing activities			
Proceeds from issuance of common stock, net of repurchases	2,488	1,134	1,479
Employees' taxes paid upon vesting of restricted stock units	(1,822)	(825)	(588)
Proceeds from issuance of common stock in private placements, net of issuance costs	4,000	19,980	84,682
Principal payments on capital leases	(1,045)	(1,366)	(3,727)
Proceeds from debt issued	83,171	10,535	78,904
Proceeds from debt issued to related party	49,862	65,000	30,000

Principal payments on debt	(5,733)	(3,277)	(52,633)
Net cash provided by financing activities	130,921	91,181	138,117
Effect of exchange rate changes on cash and cash equivalents	(1,203)	1,291	(2,712)
Net increase (decrease) in cash and cash equivalents	35,179	(23,724)	(65,111)
Cash and cash equivalents at beginning of period	6,868	30,592	95,703
Cash and cash equivalents at end of period	$42,047	$6,868	$30,592

Amyris, Inc.
Consolidated Statements of Cash Flows—(Continued)
(In Thousands)

	Years Ended December 31,		
	2014	2013	2012
Supplemental disclosures of cash flow information:			
Cash paid for interest	$6,910	$2,978	$3,399
Cash paid for income taxes, net of refunds	$—	$—	$—
Supplemental disclosures of non-cash investing and financing activities:			
Acquisitions of property, plant and equipment under accounts payable, accrued liabilities and notes payable	$114	$2,261	$2,538
Financing of equipment	$617	$—	$—
Warrants issued in connection with issuance of convertible promissory notes	$—	$1,330	$—
Financing of insurance premium under notes payable	$166	$425	$—
Receivable of proceeds for options exercised	$—	$355	$—
Capitalized taxes in property, plant and equipment	$—	$(8,572)	$—
Interest capitalized to property, plant and equipment	$—	$—	$554
Debt issued related to an investment in joint venture	$—	$68	$—
Conversion of other liability to related party debt	$—	$—	$(23,300)
Conversion of related party debt to common stock	$—	$—	$5,000
Transfer of long term deposits to property, plant and equipment	$—	$—	$12,218
Interest capitalized to debt	$5,590	$—	$—
Non-cash equity investment in affiliate	$1,281	$—	$—

See the accompanying notes to the consolidated financial statements.

Amyris, Inc.
Notes to Consolidated Financial Statements

1. The Company

Amyris, Inc. (or 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 bioscience technology to develop and provide renewable compounds for a variety of markets. The Company is currently applying its industrial synthetic biology platform to provide alternatives to select petroleum-sourced products used in consumer care, 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 including emollients, flavors and fragrance oils and diesel fuel. While the Company's platform is able to use a wide variety of feedstocks, the Company is initially focused on Brazilian sugarcane. In addition, the Company is a party to 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).

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) and developing sufficient sales volume for those products to support its operations. 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 collaborations and grants, cash contributions from product sales, and with new debt and equity financings. The Company's planned 2015 and 2016 working capital needs and its planned operating and capital expenditures are dependent on significant inflows of cash from new and existing collaboration partners and from cash generated from renewable product sales, and may also require additional funding from debt or equity financings.

Liquidity

The Company has incurred significant operating losses since its inception and believes that it will continue to incur losses and negative cash flow from operations into at least 2016. As of December 31, 2014, the Company had an accumulated deficit of $819.2 million and had cash, cash equivalents and short term investments of $43.4 million. The Company has significant outstanding debt and contractual obligations related to capital and operating leases, as well as purchase commitments.

As of December 31, 2014, the Company's debt totaled to $312.7 million, of which $17.1 million matures within the next twelve months. In addition to upcoming debt maturities, the Company's debt service obligations over the next twelve months are significant, including $9.5 million of anticipated cash interest payments. The Company's debt agreements also contain various covenants, including certain restrictions on the Company's business that could cause the Company to be at risk of defaults, such as the requirement to maintain unrestricted, unencumbered cash in an amount equal to at least 50% of the principal amount outstanding under the Hercules Loan Facility. 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 2015 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 2014, (iii) increased cash inflows from collaborations compared to 2014 and (iv) maintaining operating expenses at levels comparable to 2014, and (v) access to various financing commitments (see Note 16, "Subsequent Events").

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 2015 to support our liquidity needs through the remainder of 2015 and into 2016:

- Effect significant headcount reductions, particularly with respect to employees not connected to critical or contracted activities across all functions of the Company, including employees involved in general and administrative, research and development, and production activities.

- Shift focus to existing products and customers with significantly reduced investment in new product and commercial development efforts.

- Reduce production activity at our Brotas facility to levels only sufficient to satisfy volumes required for product revenues forecast from existing products and customers.

- Reduce expenditures for third party contractors, including consultants, professional advisors and other vendors.

- Reduce or delay uncommitted capital expenditures, including non-essential facility and lab equipment, and information technology projects.

- Closely monitor our working capital position with customers and suppliers, as well as suspend operations at pilot plants and demonstration facilities.

The contingency cash plan contemplating these actions is designed to save us an estimated $30.0 million to $40.0 million over the period through March 31, 2016.

Implementing this plan could have a 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 an 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 (or 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.

We use the equity method to account for investments in companies, if our investments provide us with the ability to exercise significant influence over operating and financial policies of the investee. Our consolidated net income or loss includes the Company's proportionate share of the net income or loss of these companies. Our judgment regarding the level of influence over each equity method investment includes considering key factors such as our ownership interest, representation on the board of directors, participation in policy-making decisions and material intercompany transactions.

Principles of Consolidation

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 Ventures and Noncontrolling Interest."

Variable Interest Entities

The Company has interests in joint venture entities that are variable interest entities (or 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 Ventures 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 revenues 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	2014	2013
Customer B	*	27 %
Customer C	19 %	14 %
Customer D	23 %	*
Customer E	28 %	**
Customer F	**	27 %

* No outstanding balance

** Less than 10%

80

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

	Years Ended December 31,		
Customers	2014	2013	2012
Customer A	*	*	13 %
Customer B	**	15 %	*
Customer C	10 %	10 %	**
Customer E	47 %	20 %	**
Customer F	**	12 %	**
Customer G	**	**	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 techniques 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 loans 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 loans payable, convertible notes and credit facility are carried on the consolidated balance sheet on a historical cost basis, because the Company has not elected to recognize the fair value of these liabilities.

The Company estimates the fair value of the compound embedded derivatives for the convertible promissory notes to Total Energies Nouvelles Activités USA (formerly known as Total Gas & Power USA, SAS, or 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 or may become convertible.

The Company estimates the fair value of the compound embedded derivatives for the first and second tranches of the August 2013 Financing (or, Tranche I Notes and Tranche II Notes, respectively) and the Rule 144A Convertible Note Offering (as defined in Note 5, "Debt" and together, Convertible Notes) using the binomial lattice model in order to estimate the fair value of the embedded derivatives. 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 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 and (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 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 fair value of the Convertible Notes excluding the embedded

derivatives is defined as the "without". This method estimates the fair value of the embedded derivatives by looking at the difference in the values between the Convertible Notes with the embedded derivatives and the fair value of the Convertible Notes without the embedded derivatives. 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 on 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 2014, 2013 and 2012 in the fair values of the bifurcated compound embedded derivatives are primarily related to the change in price of the Company's underlying common

stock and are reflected in the consolidated statements of operations as “Gain (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.

Short Term 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, 2014, 2013 and 2012. As of December 31, 2014 and 2013, the Company did not have any other-than-temporary declines in the fair value of its debt securities.

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.

Inventories

Inventories, which consist of farnesene-derived products and flavor and fragrances ingredients are stated at the lower of cost or market and categorized as finished goods, work-in-process or raw material inventories. The Company transitioned out of the ethanol and reformulated ethanol-blended gasoline business in 2012 and sold its remaining inventory of ethanol and reformulated ethanol-blended gasoline during the quarter ended September 30, 2012. 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.

Investments in Affiliates

We use the equity method to account for our investments in affiliates. We include our proportionate share of earnings and/or losses of our equity method investees in the loss from investments in affiliates in the consolidated statements of operations. The carrying value of our investments in affiliates includes loans to affiliates. Investments in affiliates are are carried at cost, as adjusted for market rates of interest imputed to non-market interest rate loans advanced to affiliates.

Restricted Cash

Cash accounts that are restricted to withdrawal or usage are presented as restricted cash. As of December 31, 2014 and 2013, the Company had $1.6 million of restricted cash held by a bank in a certificate of deposit as collateral under a facility lease and bank guarantees.

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 holds 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 that are required to be bifurcated from the underlying debt instrument (i.e. host) are accounted for and valued as separate financial instruments. The Company evaluated the terms and features of its 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 and down round conversion price adjustment provisions, that requires cash payment for forgone interest upon a change of control and down round conversion price adjustment provisions.

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 costs of the individuals dedicated to the development and 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 assets down to their estimated fair values. Fair value is estimated based on discounted future cash flows. There were $1.8 million, $7.7 million, and $6.4 million, of impairment charges recorded during the years ended December 31, 2014, 2013 and 2012, 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 goodwill and IPR&D were recognized on an acquisition completed in 2011. Goodwill and intangible assets with indefinite useful lives are assessed for impairment using fair value measurement techniques on an annual basis or more frequently if facts and circumstances 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 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. Amounts recorded as IPR&D will begin being amortized upon the completion of development activities over the estimated useful life of the technology. The development activities have not been completed, and therefore the amortization of the acquired IPR&D has not begun.

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. If this assessment indicates that the intangible asset is not recoverable, based on the estimated discounted future cash flows of the technology over its expected life, we reduce the net carrying value of the related intangible asset to fair value. Any such impairment charge could be significant and could have a material adverse effect on the Company's reported financial results. As a result of our impairment assessment of IPR&D, the Company recognized an impairment of its IPR&D asset of $3.0 million for the year ended December 31, 2014 and zero for the years ended December 31 2013 and 2012.

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 São Martinho). 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 Ventures 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 Ventures and Noncontrolling Interest").

Revenue Recognition

The Company recognizes revenue from the sale of renewable 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

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 historical rate of return for the Company's squalane products. 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 renewable 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 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.

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, including internal research. 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 "gain (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 considers the local currency to be the functional currency of the Company's wholly-owned subsidiary in Brazil and of the Company's consolidated joint venture in Brazil. 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) on the consolidated balance sheets.

Foreign currency differences arising from the translation of intercompany loans from a foreign currency into the functional currency of an entity, which are of a long-term investment nature (that is, settlement is not planned or anticipated in the foreseeable future) are recorded in "Accumulated other comprehensive income (loss)" on our Consolidated Balance Sheets. Foreign currency differences arising from the translation of other intercompany loans are recorded in "Other income (expense)" on our Consolidated Statements of Operations.

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 income (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,	
	2014	2013
Foreign currency translation adjustment, net of tax	$(29,977)	$(20,087)
Total accumulated other comprehensive loss	$(29,977)	$(20,087)

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 and common stock warrants, using the treasury stock method or the as converted method, as applicable. For the years ended December 31, 2013 and 2012, 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 were the same for each of those years.

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,		
	2014	2013	2012
Numerator:			
Net income (loss) attributable to Amyris, Inc. common stockholders	$2,286	$(235,111)	$(205,139)
Interest on convertible debt	9,365	—	—
Accretion of debt discount	5,597	—	—
Gain from change in fair value of derivative instruments	(127,109)	—	—
Net loss attributable to Amyris, Inc. common stockholders after assumed conversion	$(109,861)	$(235,111)	$(205,139)
Denominator:			
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic	78,400,098	75,472,770	56,717,869
Basic income (loss) per share	$0.03	$(3.12)	$(3.62)
Weighted average shares of common stock outstanding	78,400,098	75,472,770	56,717,869
Effect of dilutive securities:			
Convertible promissory notes	43,459,343	—	—
Weighted common stock equivalents	43,459,343	—	
Diluted weighted-average common shares	121,859,441	75,472,770	56,717,869
Diluted loss per share	$(0.90)	$(3.12)	$(3.62)

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,

	2014	2013	2012
Period-end stock options to purchase common stock	10,539,978	8,409,605	8,946,592
Convertible promissory notes [1]	26,887,005	42,905,005	10,370,391

Period-end common stock subject to repurchase	—	—	51
Period-end common stock warrants	1,021,087	1,021,087	21,087
Period-end restricted stock units	1,975,503	2,316,437	2,550,799
Total	40,423,573	54,652,134	21,888,920

(1) The potentially dilutive effect of convertible promissory notes were computed based on conversion ratios in effect as of December 31, 2014. 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 May 2014, the Financial Accounting Standards Board (or FASB) issued new guidance related to revenue recognition. This new standard will replace all current GAAP guidance on this topic and eliminate all industry-specific guidance. The new revenue recognition update guidance provides a unified model to determine how revenue is recognized. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This guidance will be effective for annual and interim periods beginning after December 15, 2016 and can be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. The Company is currently assessing the impact of adopting this new accounting standard on its financial statements.

In August 2014, FASB issued new guidance related to the disclosure around going concern. The new standard provides guidance around management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosure if substantial doubt exists. The new standard is effective for annual periods ending after December 15, 2016 and for annual periods and interim periods thereafter. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on our financial statements.

In January 2015, the FASB issued an update related to the presentation of extraordinary and unusual items. The update eliminates the concept of extraordinary items found in Subtopic 225-20, which required that an entity separately classify, present and disclose extraordinary events and transactions when the event or activity met both criteria of being unusual in nature and infrequent in occurrence. Although the concept of extraordinary items will be eliminated, the presentation and disclosure guidance for items that are unusual in nature or occur infrequently will be retained and will be expanded to include items that are both unusual in nature and infrequently occurring. The standard is effective for annual and interim periods within those annual years beginning after December 15, 2015. The Company expects that the adoption of the update will not materially affect its financial statements.

In February 2015, FASB issued an amendment to ASC 810 Consolidation. The amendments affect reporting entities that are required to evaluate whether they should consolidate certain legal entities. The amendments are effective for the fiscal years and interim periods within those fiscal years, beginning after December 15, 2015. Early adoption is permitted. The Company is currently assessing the impact of adopting this new accounting standard on its financial statements.

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, 2014, 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, 2014
Financial Assets				
Money market funds	$20,160	$—	$—	$20,160
Certificates of deposit	1,375	—	—	1,375
Loans to affiliate	—	—	1,745	1,745
Total financial assets	$21,535	$—	$1,745	$23,280
Financial Liabilities				
Loans payable [1]	$—	$16,720	$—	$16,720
Credit facilities [1]	—	39,332	—	39,332
Convertible notes [1]	—	—	222,031	222,031
Compound embedded derivative liabilities	—	—	56,026	56,026
Currency interest rate swap derivative liability	—	3,710	—	3,710
Total financial liabilities	$—	$59,762	$278,057	$337,819

[1] These liabilities are carried on the consolidated balance sheet on a historical cost basis.

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 and certificates of deposit 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. The method of determining the fair value of the compound embedded derivative liabilities is described on the next page. Market risk associated with the fixed and variable rate long-term loans payable, credit facilities and convertible notes relates to the potential reduction in fair value and negative impact to future earnings, from an increase in interest rates. The fair value of loans to affiliate are based on the present value of expected future cash flows and assumptions about current interest rates and the creditworthiness of the affiliate. Market risk associated with the compound embedded derivative liabilities relates to the potential reduction in fair value and negative impact to future earnings from a decrease in interest rates.

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 and low market interest rates, if applicable.

The Company's financial assets and financial liabilities as of December 31, 2013 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 liabilities	—	—	131,117	131,117
Currency interest rate swap derivative liability	—	3,600	—	3,600
Total financial liabilities	$—	$29,662	$263,069	$292,731

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):

	2014	2013
Balance at January 1	$131,952	$62,522
Additions to convertible notes	109,734	72,570
Change in fair value of convertible notes	(19,655)	(3,140)
Balance at December 31	$222,031	$131,952

Derivative Instruments

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

	2014	2013
Balance at January 1	$131,117	$7,894
Additions to Level 3 net of cancellation [1]	89,070	40,901
(Income) loss from change in fair value of derivative liabilities[2]	(164,161)	82,322
Balance at December 31	$56,026	$131,117

[1] Includes $1.1 million removal of derivative liability related to debt extinguishment.
[2] In addition, a loss on initial recognition of embedded derivatives of $19.5 million was recognized in 2014.

The compound embedded derivative liabilities, represent the fair value of the equity conversion options and "make-whole" provisions or down round conversion price adjustments to provisions of outstanding convertible promissory notes issued to Total and such convertible promissory notes, the Total Notes), as well as Tranche I Notes , Tranche II Notes and notes issued under the 144A convertible notes offering (Rule 144A Notes) (see Note 5, "Debt"). There is no current observable market for these types of derivatives and, as such, the Company determined the fair

value of the embedded derivatives using a Monte Carlo simulation valuation model for the Total Notes and the binomial lattice model for the Tranche I Notes, Tranche II Notes and the Rule 144A

Notes (or together the Convertible 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 or may be 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 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 and (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 derivatives 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 derivatives is defined as the "without". This method estimates the fair value of the embedded derivatives by looking at the difference in the values between the Convertible Notes with the embedded derivatives and the fair value of the Convertible Notes without the embedded derivatives. 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 derivatives 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, 2014, the Company has sufficient common stock available to settle the conversion option in shares. As of December 31, 2014 and 2013, included in "Derivative Liabilities" on the consolidated balance sheet are the Company's compound embedded derivative liabilities of $56.0 million and $131.1 million, respectively, which represents the fair value of the equity conversion options and a "make-whole" provision relating to the outstanding Total Notes, Tranche I Notes, Tranche II Notes and Rule 144A Notes.

The market-based assumptions and estimates used in valuing the compound embedded derivative liabilities include amounts in the following ranges/amounts:

	December 31, 2014	December 31, 2013
Risk-free interest rate	0.75% - 1.51%	0.86% - 1.66%
Risk-adjusted yields	21.4% and 31.5%	13%
Stock-price volatility	45%	45%
Probability of change in control	5%	5%
Stock price	$2.06	$5.29
Credit spread	19.97% - 29.99%	11.34% - 12.14%

Changes in valuation assumptions can have a significant impact on the valuation of the embedded derivative liabilities. For example, all other things being equal, a decrease/ increase in our stock price, probability of change of control, credit spread or stock price volatility decreases/increases the valuation of the liabilities, whereas a decrease/increase in risk adjusted yields or risk-free interest rates increases/decreases the valuation of the liabilities.

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 loan (or the Banco Pine Bridge Loan) (see Note 5, "Debt"). At the time of the Banco Pine 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$8.3 million based on the exchange rate as of December 31, 2014) of the Banco Pine Bridge Loan. The swap arrangement exchanges the principal and interest payments under the Banco Pine Bridge Loan 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 “Gain (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, 2014 and 2013, 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, 2014		December 31, 2013	
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	$3,710	1	$3,600

	Income	Years Ended December 31,		
Type of Derivative Contract	Statement Classification	2014	2013	2012
		Gain (Loss) Recognized		
Regulated fixed price futures contracts	Cost of products sold	$—	$—	$(288)
Currency interest rate swap [1]	Gain (loss) from change in fair value of derivative instruments	$(480)	$(2,404)	$(1,342)

[1] Certain classifications of prior period amounts have been made to conform to the current period presentation. Such reclassification did not materially change previously reported financial statements.

4. Balance Sheet Components

Inventories, net

Inventories are stated at the lower of cost or market and consist of the following (in thousands):

	December 31,	
	2014	2013
Raw materials	$2,665	$1,796
Work-in-process	5,269	7,292
Finished goods	6,572	1,800
Inventories, net	$14,506	$10,888

Prepaid Expenses and Other Current Assets

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

	December 31,	
	2014	2013
Maintenance[1]	$399	$258
Prepaid insurance[1]	701	894
Manufacturing catalysts	1,166	1,536
Recoverable VAT and other taxes	2,411	5,125
Other[1]	1,857	1,705
Prepaid expenses and other current assets	$6,534	$9,518

[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 amounts.

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Property, Plant and Equipment, net

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

	December 31,	
	2014	2013
Leasehold improvements	$39,132	$39,034
Machinery and equipment	90,657	96,585
Computers and software	8,946	8,509
Furniture and office equipment	2,445	2,535
Buildings	6,321	7,148
Vehicles	353	488
Construction in progress	38,815	41,387
	$186,669	$195,686
Less: accumulated depreciation and amortization	(67,689)	(55,095)
Property, plant and equipment, net	$118,980	$140,591

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, Tonon Bioenergia S.A. (or Tonon) (formerly 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 São Martinho sugar and ethanol mill (also in the state of São Paulo, Brazil).

Property, plant and equipment, net includes $4.1 million and $3.4 million of machinery and equipment under capital leases as of December 31, 2014 and 2013, respectively. Accumulated amortization of assets under capital leases totaled $2.3 million and $1.5 million as of December 31, 2014 and 2013, respectively.

Depreciation and amortization expense, including amortization of assets under capital leases, was $15.0 million, $16.6 million and $14.2 million for the years ended December 31, 2014, 2013 and 2012, respectively.

Other Assets

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

	December 31,	
	2014	2013
Deposits on property and equipment, including taxes	$1,738	$1,970
Recoverable taxes from Brazilian government entities	9,747	6,599
Debt issuance costs[1]	851	454
Other[1]	1,299	1,494
Total other assets	$13,635	$10,517

(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 amounts.

Accrued and Other Current Liabilities

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

	December 31,	
	2014	2013
Professional services	$2,015	$2,279
Accrued vacation	2,213	2,274
Payroll and related expenses	5,393	5,066
Tax-related liabilities	277	825
Deferred rent, current portion	1,111	1,111
Accrued interest	1,308	3,176
Contractual obligations to contract manufacturers	310	4,241
Other	938	2,249
Total accrued and other current liabilities	$13,565	$21,221

Derivative Liabilities

Derivative liabilities are comprised of the following (in thousands):

	December 31,	
	2014	2013
Fair market value of swap obligations	$3,710	$3,600
Fair value of compound embedded derivative liabilities[(1)]	56,026	131,117
Total derivative liabilities	$59,736	$134,717

(1) The compound embedded derivative liabilities represent the fair value of the bifurcated conversion options that contain "make-whole provisions" or down round conversion price adjustment provisions included in the outstanding Total Notes, Tranche I Notes, Tranche II Notes and the 144A Offering (see Note 3, "Fair value of financial instruments" and Note 5, "Debt").

5. Debt

Debt is comprised of the following (in thousands):

	December 31,	
	2014	2013
FINEP credit facility	$1,614	$2,244
BNDES credit facility	4,314	6,523
Hercules loan facility	29,779	—
Credit facilities	35,707	8,767
Convertible notes	60,418	28,537
Related party convertible notes	115,239	89,499
Loans payable	21,097	25,259
Total debt	232,461	152,062
Less: current portion	(17,100)	(6,391)
Long-term debt	$215,361	$145,671

FINEP Credit Facility

In November 2010, the Company entered into a credit facility with Financiadora de Estudos e Projetos (or the FINEP Credit Facility). The FINEP Credit Facility was extended to partially fund expenses related to the Company's research and development project on sugarcane-based biodiesel (or the FINEP Project) and provides for loans of up to an aggregate principal amount of R$6.4 million (approximately US$2.4 million based on the exchange rate as of December 31, 2014) which is secured by a chattel mortgage on certain equipment of Amyris Brasil as well as by bank letters of guarantee. All available credit under this facility is 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, 2014 and 2013, the total outstanding loan balance under this credit facility was R$4.3 million (approximately US$1.6 million based on the exchange rate as of December 31, 2014) and R$5.2 million (approximately US$2.2 million based on exchange rate as of December 31, 2013), respectively.

BNDES Credit Facility

In December 2011, the Company entered into a credit facility with the Brazilian Development Bank (or BNDES and such credit facility is the BNDES Credit Facility) in the amount of R$22.4 million (approximately US$8.4 million based on the exchange rate as of December 31, 2014). 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 BNDES Credit Facility, subject to extension by the lender. The credit line was cancelled in 2013.
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 are 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$9.4 million based on the exchange rate as of December 31, 2014). 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 the BNDES 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, BNDES may terminate its commitments and declare immediately due all borrowings under the facility. As of

December 31, 2014 and 2013, the Company had R$11.5 million (approximately US$4.3 million based on the exchange rate as of December 31, 2014) and R$15.3 million (approximately US$6.5 million based on the exchange rate as of December 31, 2013), respectively, in outstanding advances under the BNDES Credit Facility.

Hercules Loan Facility

In March 2014, the Company entered into a Loan and Security Agreement with Hercules Technology Growth Capital, Inc. (or Hercules) to make available to Amyris a loan in the aggregate principal amount of up to $25.0 million (or the Hercules Loan Facility). The original Hercules Loan Facility 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 9.50%. The Company may repay the loaned amounts before the maturity date (generally February 1, 2017) if it pays an additional fee of 3% of the outstanding loans (1% if after the initial twelve-month period of the loan). The Company was also required to pay a 1% facility charge at the closing of the transaction, and is required to pay a 10% end of term charge. In connection with the original Hercules Loan Facility, Amyris agreed to certain customary representations

and warranties and covenants, as well as certain covenants that were subsequently amended (as described below). The total available credit of $25.0 million under this facility was fully drawn down by the Company.

In June 2014, the Company and Hercules entered into a first amendment (or the Hercules Amendment) of the Loan and Security Agreement entered into in March 2014. Pursuant to the Hercules Amendment, the parties agreed to adjust the term loan maturity date from May 31, 2015 to February 1, 2017 and remove (i) a requirement for the Company to pay a forbearance fee of $10.0 million in the event certain covenants were not satisfied, (ii) a covenant that the Company maintain positive cash flow commencing with the fiscal quarter beginning October 1, 2014, (iii) a covenant that, beginning with the fiscal quarter beginning July 1, 2014, the Company and its subsidiaries achieve certain projected cash product revenues and projected cash product gross profits, and (iv) an obligation for the Company to file a registration statement on Form S-3 with the SEC by no later than June 30, 2014 and complete an equity financing of more than $50.0 million by no later than September 30, 2014. The Company further agreed to include a new covenant requiring the Company to maintain unrestricted, unencumbered cash in an amount equal to at least 50% of the principal amount then outstanding under the Hercules Loan Facility and borrow an additional $5.0 million. The additional $5.0 million borrowing was completed in June 2014, and accrues interest at a rate per annum equal to the greater of either the prime rate reported in the Wall Street Journal plus 5.25% or 8.5%. The Hercules Loan Facility is secured by liens on the Company's assets, including on certain Company intellectual property. The Hercules Loan Facility includes customary events of default, including failure to pay amounts due, breaches of covenants and warranties, certain cross defaults and judgments, and insolvency. If an event of default occurs, Hercules may require immediate repayment of all amounts due.

As of December 31, 2014, $29.8 million was outstanding under the Hercules Loan Facility, net of discount of $0.2 million, and the Company maintains cash in excess of the approximately $15.0 million current minimum cash covenant described above.

Convertible Notes

Fidelity

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 (or the Fidelity Securities Purchase Agreement), between the Company and certain investment funds affiliated with FMR LLC. 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 (or the Fidelity Notes). As of December 31, 2014, 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 provided by Temasek in October 2013 (or the Temasek Bridge Note) (and the August 2013 Financing (defined below). 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.

Pursuant to a Securities Purchase Agreement among the Company, Maxwell (Mauritius) Pte Ltd (or Temasek) and Total, dated as of August 8, 2013 (or the August 2013 SPA), as amended in October 2013 to include certain entities affiliated with FMR LLC (or the Fidelity Entities) the Company sold and issued certain senior convertible notes (or the Tranche I Notes) pursuant to the financing (or the August 2013 Financing) exempt from registration under the Securities Act of 1933, as amended, (or the Securities Act) with an aggregate principal amount of $7.6 million of Tranche I Notes sold to the Fidelity Entities. See "Related Party Convertible Notes" in Note 5, "Debt."

Rule 144A Convertible Note Offering

In May 2014, the Company entered into a Purchase Agreement with Morgan Stanley & Co. LLC, as the initial purchaser (or the Initial Purchaser), relating to the sale of $75.0 million aggregate principal amount of its 6.50% Convertible Senior Notes due 2019 (or the 144A Notes) to the Initial Purchaser in a private placement, and for initial resale by the Initial Purchaser to certain qualified institutional buyers (or the 144A Offering). In addition, the Company granted the Initial Purchaser an option to purchase up to an additional $15.0 million aggregate principal amount of 144A Notes, which option expired according to its terms. Under the terms of the purchase agreement for the 144A Notes, the Company agreed to customary indemnification of the Initial Purchaser against certain liabilities. The Notes were issued pursuant to an Indenture, dated as of May 29, 2014 (or the Indenture), between the Company and Wells Fargo Bank, National Association, as trustee. The net proceeds from the offering of the 144A Notes were approximately $72.0 million after payment of the Initial Purchaser’s discounts and offering expenses. In addition, in connection with obtaining a waiver from Total of its preexisting contractual right to exchange certain senior secured convertible notes previously issued by the Company for new notes issued in the offering, the Company used approximately $9.7 million of the net proceeds to repay previously issued notes (representing the amount of 144A Notes purchased by Total from the Initial Purchaser). Certain of the Company's affiliated entities purchased $24.7 million in aggregate principal amount of 144A Notes from the Initial Purchaser (described further below under "Related Party Convertible Notes"). The 144A Notes bear interest at a rate of 6.50% per year, payable semiannually in arrears on May 15 and November 15 of each year, beginning November 15, 2014. The 144A Notes mature on May 15, 2019 unless earlier converted or repurchased. The 144A Notes are convertible into shares of the Company's common stock at any time prior to the close of business day on May 15, 2019. The 144A Notes have an initial conversion rate of 267.0370 shares of Common Stock per $1,000 principal amount of 144A Notes (subject to adjustment in certain circumstances). This represents an initial effective conversion price of approximately $3.74 per share of common stock. For any conversion on or after May 15, 2015, in the event that the last reported sale price of the Company’s common stock for 20 or more trading days (whether or not consecutive) in a period of 30 consecutive trading days ending within five trading days immediately prior to the date the Company receives a notice of conversion exceeds the conversion price of $3.74 per share on each such trading day, the holders, in addition to the shares deliverable upon conversion, will be entitled to receive a cash payment equal to the present value of the remaining scheduled payments of interest that would have been made on the 144A Notes being converted from the conversion date to the earlier of the date that is three years after the date the Company receives such notice of conversion and maturity (May 15, 2019). In the event of a fundamental change, as defined in the Indenture, holders of the 144A Notes may require the Company to purchase all or a portion of the 144A Notes at a price equal to 100% of the principal amount of the 144A Notes, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. Holders of the 144A Notes who convert their 144A Notes in connection with a make-whole fundamental change will receive additional shares representing the present value of the remaining interest payments which will be computed using a discount rate of 0.75%. If a holder of 144A Notes elects to convert their 144A Notes prior to the effective date of any make-whole fundamental change, such holder will not be entitled to an increased conversion rate in connection with such conversion.

As of December 31, 2014 the convertible notes outstanding under the 144A Notes were $30.3 million, net of discount of $20.0 million.

Related Party Convertible Notes

Total R&D 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 a new structure for a joint venture (or 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 (or the July 2012 Agreements).

The purchase agreement for the notes related to the funding from Total (or the Total Purchase Agreement) provided for the sale of an aggregate of $105.0 million in 1.5% Senior Unsecured Convertible Note due March 2017 (or the Total Notes) as follows:

- As part of an initial closing under the purchase agreement (which was completed in two installments), (i) on July 30, 2012, the Company sold a Total Note with a principal 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 Total Note 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 Total 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).

- A third closing (for cash proceeds to the Company of $21.7 million (or the Third Closing Notes), also completed in two installments, the first of which occurred in July 2014 for $10.85 million and a second installment of $10.85 million which occurred in January 2015).

The Total Notes have a maturity date of March 1, 2017, an initial conversion price equal to $7.0682 per share for the Total Notes issued under the initial closing, an initial conversion price equal to $3.08 per share for the Total Notes issued under the second closing and an initial conversion price equal to $4.11 per share for the Total Notes issued in the third closing. The Total 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 partially or fully cancelled if the Total Notes are cancelled based on a final decision by Total to go forward with the fuels collaboration (either partially with respect to jet fuel or fully with respect to jet fuel and diesel (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 Total 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 with respect to the full fuels collaboration, then the Total Notes will be exchanged by Total for equity interests in the Fuels JV, after which the Total Notes will not be convertible and any obligation to pay principal or interest on the Total Notes will be extinguished. In case of a “Go” decision only with respect to jet fuel, the parties would form an operational joint venture only for jet fuel (and the rights associated with diesel would terminate), 70% of the outstanding Total Notes would remain outstanding and become payable by the Company, and 30% of the outstanding Total Notes would be cancelled. If Total makes a “No-Go” decision, outstanding Total Notes will remain outstanding and become payable at maturity.

In connection with the December 2012 private placement of the Company’s common stock involving certain existing stockholders of the Company (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 Total Notes into 1,677,852 of the Company's common stock at a price of $2.98 per share. As such, $5.0 million of Total's outstanding $53.3 million in Total 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 the year ended December 31, 2012.

In March 2013, the Company entered into a letter agreement with Total (or 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 $30.0 million in principal amount of Total Notes to be issued in connection with the second closing of the Total Notes (as described above) 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 March 2013 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.

In June 2013, the Company sold and issued $10.0 million in principal amount of Total Notes to Total pursuant to the second closing of the Total Notes as discussed above. In accordance with the March 2013 Letter Agreement, this Total Note had an initial conversion price equal to $3.08 per share of the Company's common stock.

In July 2013, the Company sold and issued $20.0 million in principal amount of Total Notes to Total pursuant to the Total second closing of the Total Notes as discussed above. This purchase and sale completed Total's commitment to purchase $30.0 million of the Total Notes in the second closing by July 2013. In accordance with the March 2013 Letter Agreement, this Total Note has an initial conversion price equal to $3.08 per share of the Company's common stock.

The conversion prices of the Total Notes 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 Total Notes in the event of a change of control of the Company and the Total Notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment. The Total Purchase Agreement and Total 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 Total 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 Total Purchase Agreement and Total Notes, with added default interest rates and associated cure periods applicable to the covenant regarding SEC reporting. Furthermore, the Total 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 Total 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 the Temasek Bridge Note for $35.0 million and in connection with the 144A Offering in May 2014, Total waived compliance with the debt limitations outlined above as to the Temasek Bridge Note, the August 2013 Financing and the 144A Offering.

In December 2013, in connection with the Company's entry into a Shareholders Agreement dated December 2, 3013 and License Agreement dated December 2, 2013 (or, collectively, the JV Documents) with Total and Total Amyris BioSolutions B.V. (or JVCO) relating to the establishment of JVCO (see Note 7, "Joint Ventures and Noncontrolling Interest"), the Company (i) exchanged the $69.0 million of the then-outstanding Total Notes issued pursuant to the Total Purchase Agreement for replacement 1.5% senior secured convertible notes, in principal amounts equal to the principal amount of each cancelled note (or the Replacement Notes), ii) granted to Total a security interest in and lien on all Amyris’ rights, title and interest in and to Company’s shares in the capital of JVCO and (iii) agreed that any securities to be purchased and sold at the third closing under the Total Purchase Agreement by Total shall be Replacement Notes instead of Total Notes. As a consequence of executing the JV Documents and forming JVCO, the security interest in all of the Company's intellectual property, granted by the Company in favor of Total, Temasek, and certain Fidelity Entities pursuant to the Restated Intellectual Property Security Agreement dated as of October 16, 2013, were automatically terminated effective as of December 2, 2013 upon Total’s and the Company’s joint written notice to Temasek and the Fidelity Entities.

In April 2014, the Company and Total entered into a letter agreement dated as of March 29, 2014 (or the March 2014 Total Letter Agreement) to amend the Amended and Restated Master Framework Agreement entered into as of December 2, 2013 (included as part of JV Documents, as defined below) and the Total Purchase Agreement. Under the March 2014 Total Letter Agreement, the Company agreed to, (i) amend the conversion price of the Replacement Notes to be issued in the third closing under the Total Purchase Agreement from $7.0682 per share to $4.11 per share subject to stockholder approval at the Company's 2014 annual meeting (which was obtained in May 2014), (ii) extend the period during which Total may exchange for other Company securities Replacement Notes issued under the July 2012 Agreements from June 30, 2014 to the later of December 31, 2014 and the date on which the Company shall have raised $75.0 million of equity and/or 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 third closing

sale, and (iv) beginning on March 31, 2014, 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 Third Closing Notes if it had decided not to proceed with the collaboration and had made a "No-Go" decision with respect thereto.

In July 2014, the Company sold and issued a Replacement Note to Total with a principal amount of $10.85 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement. This purchase and sale constituted the initial installment of the $21.7 million third closing described above. In accordance with the March 2014 Total Letter Agreement, this convertible note has an initial conversion price equal to $4.11 per share of the Company's common stock.

As of December 31, 2014 and 2013, $51.0 million and $51.5 million, respectively, of Replacement Notes were outstanding, net of debt discount of $13.1 million and $17.6 million, respectively.

August 2013 Financing Convertible Notes and Temasek Bridge Note

In connection with the August 2013 Financing, the Company entered into the August 2013 Share Purchase Agreement 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 was 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 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 notes previously issued to Total in the second closing under the Total Purchase Agreement. In September 2013, prior to the initial closing of the August 2013 Financing, the Company's 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 the Company's 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 October 2013, the Company sold and issued the Temasek Bridge Note in exchange 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% quarterly from the October 4, 2013 date of issuance. The Temasek Bridge Note was cancelled on October 16, 2013 as payment for Temasek’s purchase of Tranche I Notes in the first tranche of the August 2013 Financing as further described below.

In October 2013, the Company amended the August 2013 SPA to include Fidelity Entities in the first tranche of the August 2013 Financing with an investment amount of $7.6 million, and to proportionally increase the amount acquired by exchange and cancellation of outstanding Total Notes held by Total in connection with its exercise of pro rata rights up 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 first tranche of the August 2013 Financing, issuing a total of $51.8 million in 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 and the remaining $9.2 million from the exchange and cancellation of an outstanding Total Note. As a result of the exchange and cancellation of the $35.0 million Temasek Bridge Note and the $9.2 million Total Note for the Tranche I Notes, the Company recorded a loss from extinguishment of debt of $19.9 million. 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, which represents a 15% discount to a trailing 60-day weighted-average closing price of the common stock on The NASDAQ Stock Market (or NASDAQ) through August 7, 2013, 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) (i) a specified Company manufacturing plant failed to achieve a total production of 1.0 million liters within a run period of 45 days prior to June 30, 2014, or (ii) the Company fails to achieve gross margins from product sales of at least 5% prior to June 30, 2014, or (b) 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. In 2013, the Company achieved a total production of 1.0 million liters within a run period of 45 days in satisfaction of clause (a)(i) of the preceding sentence and the Company achieved clause (a)(ii) by achieving 8% gross margins from product sales prior to June 30, 2014. 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.

In January 2014, the Company sold and issued, for face value, approximately $34.0 million of convertible promissory notes in the second tranche of the August 2013 Financing (or the Tranche II Notes). At the closing, Temasek purchased $25.0 million of the Tranche II Notes and Wolverine Asset Management, LLC (or Wolverine) purchased $3.0 million of the Tranche II Notes, each for cash. Total purchased approximately $6.0 million of the Tranche II Notes through cancellation of the same amount of principal of previously outstanding Replacement Notes held by Total. As a result of the exchange and cancellation of the $6.0 million Total Note for the Tranche II Notes, the Company recorded a loss from extinguishment of debt of $9.4 million. The Tranche II Notes will be due sixty months from the date of issuance and will be convertible into shares of common stock at a conversion

price equal to $2.87 per share, 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 Tranche II Notes are 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 will accrue 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 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 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.

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.

As of December 31, 2014 and 2013, the amounts outstanding under the Tranche I and Tranche II Notes were $49.2 million and $37.9 million, respectively, net of debt discount of $30.7 million and $6.3 million, respectively. The debt discount is the result of the bifurcation of the conversion options that contain "make-whole" provision or down round conversion price adjustment provisions associated with the outstanding debt.

Rule 144A Convertible Notes Sold to Related Parties

As discussed above under “Rule 144A Convertible Note Offering”, the Company sold and issued $75.0 million aggregate principal amount of 144A Notes pursuant to Rule 144A of the Securities Act. In connection with obtaining a waiver from one of its existing investors, Total, of its preexisting contractual right to exchange certain senior secured convertible notes previously issued by Amyris pursuant to the Total Purchase Agreement for 144A Notes issued in the transaction, Amyris used approximately $9.7 million of the net proceeds to repay such amount of previously issued Replacement Notes held by Total, which represented the amount of 144A Notes purchased by Total from the Initial Purchaser under the 144A Offering. As a result of the settlement of the $9.7 million of Replacement Notes, the Company recorded a loss from extinguishment of debt of $1.1 million in the year ended December 31, 2014.

Additionally, Foris Ventures, LLC (a fund affiliated with John Doerr, a director of the Company) and Temasek each participated in the 144A Offering and purchased $5.0 million and $10.0 million, respectively, of the convertible promissory notes sold thereunder.

As of December 31, 2014 the related party convertible notes outstanding under the 144A Notes were $14.9 million, net of discount of $9.8 million.

As of December 31, 2014 and 2013, the total related party convertible notes outstanding were $115.2 million and $89.5 million, respectively, net of discount of $53.8 million and $23.9 million, respectively. For the years ended December 31, 2014, 2013 and 2012, the Company recorded a loss from extinguishment of debt from the exchange and cancellation of related party convertible notes of $10.5 million, $19.9 million, and $0.9 million, respectively.

Loans Payable

In July 2012, the Company entered into a Note of Bank Credit and a Fiduciary Conveyance of Movable Goods Agreement (together, the July 2012 Bank Agreements) with each of Nossa Caixa Desenvolvimento (or Nossa Caixa) and Banco Pine S.A. (or 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$25.6 million based on the exchange rate as of December 31, 2014). 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$19.6 million based on the exchange rate as of December 31, 2014) 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 has been required to pay equal monthly installments of both principal and interest for the remainder of the term of the loans. As of December 31, 2014 and 2013, a principal amount of $18.6 million and $22.2 million, respectively, was outstanding under these loan agreements.

In March 2013, the Company 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. This loan was collateralized by future exports from the Company's subsidiary in Brazil. As of December 31, 2014 and 2013, the principal amount outstanding under this agreement was zero and $2.5 million, respectively. In March 2014, the Company entered into an additional export financing agreement with ABC for approximately $2.2 million to fund exports through March 2015. This loan is collateralized by future exports from the Company's subsidiary in Brazil. As of December 31, 2014, the principal amount outstanding under this agreement was $2.2 million The Company is also a parent guarantor for the payment of the outstanding balance under these loan agreements.

In October 2013, the Company had a financing arrangement with a third party for the monthly payments of its insurance premiums of $0.6 million payable in nine monthly installments of principal and interest. Interest accrues at a rate of 3.24% per annum. The loan was settled in 2014. In October 2014, the Company entered into another financing arrangement amounting to $0.6 million to pay for the current insurance premiums under the same terms. As of December 31, 2014 and 2013, the outstanding unpaid loan balance was $0.3 million and $0.4 million, respectively.

In February 2014, the Company borrowed $0.2 million from a third party lender to pay for the Company's consolidated VIE's current insurance premiums. The loan is payable in ten monthly installments of principal and interest. Interest accrues at a rate of 5.95% per annum. As of December 31, 2014, the outstanding loan was fully paid.

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 $1.0 million and $0.9 million as restricted cash as of December 31, 2014 and 2013.

Future minimum payments under the debt agreements as of December 31, 2014 are as follows (in thousands):

Years ending December 31:	Related Party Convertible Debt	Convertible Debt	Loans Payable	Credit Facility	Total
2015	$1,610	$4,029	$5,957	$14,986	$26,582
2016	1,605	4,020	3,263	19,885	28,773
2017	70,126	28,715	3,128	7,451	109,420
2018	74,486	15,685	2,995	391	93,557
2019	75,825	56,798	2,862	107	135,592
Thereafter	—	—	6,780	—	6,780
Total future minimum payments	223,652	109,247	24,985	42,820	400,704
Less: amount representing interest[(1)]	(108,413)	(48,829)	(3,888)	(7,113)	(168,243)
Present value of minimum debt payments	115,239	60,418	21,097	35,707	232,461
Less: current portion	—	—	(4,987)	(12,113)	(17,100)
Noncurrent portion of debt	$115,239	$60,418	$16,110	$23,594	$215,361

(1) Including debt discount of $80.2 million related to the embedded derivative associated with the related party and non-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 non-cancellable 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 as straight-line rent expense over the lease term. The Company has non-cancellable 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 $5.4 million, $4.8 million and $4.9 million, for the years ended December 31, 2014, 2013 and 2012, 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 $0.3 million and $1.2 million during the years ended December 31, 2014 and 2013, 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 (or 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 Tonon 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, 2014, are as follows (in thousands):

Years ending December 31:	Capital Leases	Operating Leases	Total Lease Obligations
2015	$580	$6,694	$7,274
2016	265	6,564	6,829
2017	25	6,565	6,590
2018	—	6,653	6,653
2019	—	6,791	6,791
Thereafter	—	25,346	25,346
Total future minimum lease payments	870	$58,613	$59,483
Less: amount representing interest	(54)		
Present value of minimum lease payments	816		
Less: current portion	(541)		
Long-term portion	$275		

Guarantor Arrangements

The Company has agreements whereby it indemnifies its officers and directors for certain events or occurrences while the officer or directors are serving in their official capacities. The indemnification period remains enforceable 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 payments. 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, 2014 and 2013.

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$2.3 million based on the exchange rate as of December 31, 2014).

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$9.4 million based on the exchange rate as of December 31, 2014). 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 $0.6 million restricted cash as of both December 31, 2014 and 2013.

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$25.6 million based on the exchange rate as of December 31, 2014). 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 with ABC for approximately $2.5 million for a one-year term to fund exports through March 2014. As of December 30, 2014, the loan was fully paid. The Company entered into another export financing agreement with the same bank for approximately $2.2 million for a one year term to fund exports through March 2015. This loan is collateralized by future exports from Amyris Brazil. The Company is also a parent guarantor for the payment of the outstanding balance under these loan agreements.

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, 2014) 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 (or 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 (or 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 Total Purchase Agreement. The Security Agreement provided that such security interest would terminate if Total and the Company entered into certain agreements relating to the formation of the Fuels JV. In connection with Total's agreement 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 issued pursuant to the Total Purchase Agreement and held by Total (or 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 entered into the JV Documents on or prior to December 2, 2013. The Company and Total entered into the JV agreements on December 2, 2013 and the Amendment Agreement and all security interests thereunder were automatically terminated and the conversion price of the Total Securities remained at $7.0682 per share.

In December 2013, in connection with the execution of JV Documents entered into by and among Company, Total and JVCO relating to the establishment of the JVCO (see Note 5, "Debt" and Note 7, "Joint Ventures and Noncontrolling Interest"), the Company agreed to exchange the $69.0 million outstanding Total unsecured convertible notes issued pursuant to the Total Purchase Agreement and issued 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 the Company's rights, title and interest in and to the Company's shares in the capital of the JVCO. Following execution of the JV Documents, all notes that have been issued became senior secured convertible notes. Further, the $10.85 million in principal amount of such notes issued in the initial tranche of the third closing under the Total Purchase Agreement in July 2014 and the notes issued in connection with the second tranche of the third closing

(up to $10.85 million in principal amount issued in January 2015) are senior secured convertible notes instead of senior unsecured convertible notes.

The Hercules Loan Facility (see Note 5, "Debt") is collateralized by liens on the Company's assets, including certain Company intellectual property.

Purchase Obligations

As of December 31, 2014, the Company had $2.9 million in purchase obligations which included $1.6 million in non-cancellable contractual obligations and construction commitments, of which zero 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 reasonably 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 plaintiffs declined to amend their complaint further and, on June 12, 2014, the court issued an order (based on stipulation of the parties) dismissing the action with prejudice.

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 were related and were heard by the same judge. On June 23, 2014, following the dismissal of the related class action (discussed above), the court issued an order (based on stipulation of the parties) dismissing the action with prejudice.

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 reasonable assurance and therefore an estimate of all the reasonably possible losses cannot be determined at this time. 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 Ventures and Noncontrolling Interest

Novvi LLC

In September 2011, the Company and Cosan US, Inc. (or Cosan U.S.) formed Novvi LLC (or Novvi), a U.S. entity that is jointly owned by the Company and Cosan U.S. . 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 (or the Operating Agreement), which sets forth the governance procedures for Novvi and the parties' initial contribution. The Company also entered into an IP License Agreement with Novvi (or 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. each own 50% of Novvi and each party shares 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. was obligated to fund its 50% ownership share of Novvi in cash in the amount of $10.0 million and the Company was 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 Cosan U.S. and Amyris agreed was 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.

In April 2014, the Company purchased additional Membership Units of Novvi for an aggregate purchase price of $0.2 million. Also in April 2014, the Company contributed $2.1 million in cash in exchange for receiving additional Membership Units in Novvi. Each member owns 50% of Novvi's issued and outstanding Membership Units.

In September 2014, the Company and Cosan U.S. entered into a member senior loan agreement to grant Novvi a loan amounting to approximately $3.7 million. The loan is due on September 1, 2017 and bears interest at a rate of 0.36% per annum. Interest accrues daily and will be due and payable in arrears on September 1, 2017. The Company and Cosan U.S. each agreed to provide 50% of the loan. The Company's share of approximately $1.8 million was disbursed in two installments. The first installment of $1.2 million was made in September 2014 and the second installment of $0.6 million was made in October 2014. In November 2014, the Company and Cosan U.S. entered into a second member senior loan agreement to grant Novvi a loan of approximately $1.9 million. The loan is due on November 10, 2017 and bears interest at a rate of 0.36% per annum. Interest accrues daily and will be due and payable in arrears on November 10, 2017. The Company and Cosan U.S. each agreed to provide 50% of the loan. The Company disbursed its share of approximately $1.0 million in November 2014. As of December 31, 2014 total loans to Novvi were $1.7 million, net of imputation of interest of $1.0 million as result of the below market interest rate on the loan to affiliate.

The following table is a reconciliation of our equity and loans in Novvi:

	December 31,	
(In thousands)	2014	2013
Balance at January 1	$—	$—
Additional investments	2,312	5,000
Deferred gain on investment	—	(5,000)
Share in net loss of affiliate net of deferred gain on investment	(2,910)	—
Adjustment on imputation of interest	1,045	—
Loan to affiliate	1,745	—
Balance at December 31	$2,192	$—

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 “Loss from investment in affiliate” in the consolidated statements of operations. For the years ended December 31, 2014 and 2013, the Company recorded $2.9 million and zero for its share of Novvi's net loss. The carrying amount of the Company's investment in Novvi as of December 31, 2014 was reduced to zero by its share in Novvi's loss. The Company recorded no amounts of its share of Novvi's net loss in December 31, 2013 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. Refer to Note 13, "Related Party Transactions" for details of other transactions between the Company and Novvi.

Total Amyris BioSolutions B.V.

In November 2013, the Company and Total formed 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 (or a "Go Decision"), (ii) Total elects to not continue its participation in the R&D Program and JVCO (or 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 of JVCO 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").

JVCO has an initial capitalization of €0.1 million (approximately US$0.1 million based on the exchange rate as of December 31, 2014). 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 "Loss from investment in affiliate" in the consolidated statements of operations. Following a Go Decision, no later than six months prior to July 31, 2016, the Company and Total are required to 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, to 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.

SMA Indústria Química S.A.

In April 2010, the Company established SMA, a joint venture with São Martinho, to build a production facility in Brazil. SMA is located at the São Martinho 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 São Martinho 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 to fund the construction costs of the new facility and São Martinho would reimburse the Company up to R$61.8 million (approximately US$23.3 million based on the exchange rate as of December 31, 2014) of the construction costs after SMA commences production. After commercialization, the Company would market and distribute Amyris renewable products produced by SMA and São Martinho 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 São Martinho 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 São Martinho'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 São Martinho, then São Martinho has the right to acquire the Company's interest in SMA. If São Martinho becomes controlled, directly or indirectly, by a competitor of the Company, then the Company has the right to sell its interest in SMA to São Martinho. 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 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 São Martinho'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 2013 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 São Martinho which updated and documented 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 no later than March 31, 2017, and (ii) the extension of an option held by São Martinho 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.

Glycotech

In January 2011, the Company entered into a production services agreement with Glycotech, Inc. (or the Glycotech Agreement), 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 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 Glycotech Agreement. Accordingly, the Company consolidates the financial results of Glycotech. As of December 31, 2014 and 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, 2014, the assets include $19.0 million in property, plant and equipment, $3.4 million in other assets and $0.4 million in current assets. The liabilities include $0.2 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)	2014	2013
Assets	$22,812	$25,730
Liabilities	$290	$229

The change in noncontrolling interest for the years ended December 31, 2014 and 2013 is summarized below (in thousands):

	2014	2013
Balance at January 1	$(584)	$(877)
Foreign currency translation adjustment	92	89
Net income (loss) attributable to noncontrolling interest	(119)	204
Balance at December 31	$(611)	$(584)

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 (or the Collaboration Agreement) with Total Gas & Power USA Biotech, Inc., an affiliate of Total S.A. 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 multiphase 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 has also seconded employees at Amyris to work on the projects under the Collaboration Agreement. 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.

In November 2011, the Company and Total entered into an amendment of the Technology License, Development, Research and Collaboration Agreement (or 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, provided a new structure for 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 (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 Total 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 an aggregate of $105.0 million in notes (the Notes) (see Note 5, "Debt"). 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 Total.

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 with a principal 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 with a principal 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 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 April 2014, the Company and Total entered into the March 2014 Total Letter Agreement to amend the Amended and Restated Master Framework Agreement entered into as of December 2, 2013 (included as part of JV Documents, as defined below) and the Total Purchase Agreement. Under the March 2014 Total Letter Agreement, the Company agreed to, (i) amend the conversion price of the convertible notes to be issued in the third closing under the Total Purchase Agreement from $7.0682 to $4.11 subject to stockholder approval at the Company's 2014 annual meeting (which was obtained in May 2014), (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 the Company shall have raised $75.0 million of equity and/or 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 third closing sale, and (iv) beginning on March 31, 2014, 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 third closing notes if it had decided not to proceed with the collaboration and had made a "No-Go" decision with respect thereto.

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.

In February 2014, the Company entered into an amendment to the joint development and license agreement with the collaboration partner noted in the preceding paragraph to proceed with the second phase of the collaboration and the development of a certain fragrance ingredient.

The Company recognized collaboration revenue for the years ended December 31, 2014 and 2013, of $2.5 million and $6.0 million, respectively under this agreement. As of December 31, 2014 and 2013, zero and $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 agreement, the collaboration partner was to fund technical development at the Company to produce an ingredient for the flavors and fragrances market. The Company agreed to manufacture the ingredient and the collaboration partner would market it, and the parties would share in any resulting economic value. The agreement also grants exclusive worldwide flavors and fragrances 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. The Company concluded that these milestone payments are substantive. All performance milestones under this agreement were achieved in 2013. Collaboration revenues of $2.0 million were recognized in each of the years ended December 31, 2013 and 2012.

In March 2013, the Company entered into a Master Collaboration Agreement (or March 2013 Agreement) with the collaboration partner to establish a collaboration arrangement for the development and commercialization of multiple renewable flavors and fragrances 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 flavors and fragrances products in exchange for research and development funding and a profit sharing arrangement. The agreement superseded and expanded the prior collaboration agreement between the Company and the collaboration partner.

The agreement provided for 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 in March 2013 and the second payment was received in March 2014. The Company recognized collaboration revenues under the Master Collaboration Agreement with the collaboration partner for the years ended December 31, 2014 and 2013, of $10.0 million and $7.9 million, respectively. The agreement contemplated 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 December 2014, the Company achieved the first performance milestone under the Master Collaboration Agreement and recognized collaboration revenues of $2.0 million for the year ended December 31, 2014.

In addition, the Master Collaboration Agreement contemplated 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 March 2013 Agreement, the parties agreed to jointly select target compounds, subject to final approval of compound specifications by the collaboration partner. During the development phase, the Company would be required to provide labor, intellectual property and technology infrastructure and the collaboration partner would be required to contribute downstream polishing expertise and market access. The March 2013 Agreement provided that the Company would own research and development and strain engineering intellectual property, and the collaboration partner would own blending and, if applicable, chemical conversion intellectual property. Under certain circumstances such as the Company's insolvency, the collaboration partner would gain expanded access to the Company's intellectual property. Following development of flavors and fragrances compounds under the March 2013 Agreement, the March 2013 Agreement contemplated that the Company would manufacture the initial target molecules for the compounds and the collaboration partner will perform any required downstream polishing and distribution, sales and marketing.

In September 2014, the Company entered into a supply agreement with the collaboration partner to provide target compounds to make certain finished ingredient and market and sell such finished ingredient and/or products to the flavors and fragrances market. The Company recognized revenues from product sales under this agreement of $8.2

million for the year ended December 31, 2014.

Collaboration Agreement Michelin and Braskem

In September 2011, the Company entered into a collaboration agreement with Michelin. Under the terms of the September 2011 collaboration agreement, the Company and Michelin agreed to 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.

In June 2014, the Company entered into a collaboration agreement with Braskem and Michelin to collaborate to develop the technology to produce and possibly commercialize renewable isoprene. The term of the collaboration agreement commenced on June 30, 2014 and will continue, unless earlier terminated in accordance with the agreement, until the first to occur of (i) the date that is three (3) years following the actual date on which a work plan is completed, which date is estimated to occur on or

about December 30, 2020 or (ii) the date of the commencement of commissioning of a production plant for the production of renewable isoprene. The June 2014 collaboration agreement terminated and supersedes the September 2011 collaboration agreement with Michelin, and as a result of the signing of the June 2014 collaboration agreement, the upfront payment by Michelin of $5.0 million is being rolled into the new collaboration agreement between Michelin, Braskem and the Company as Michelin's collaboration funding towards the research and development activities to be performed. As of December 31, 2014, the Company accrued a total contribution from Braskem to the collaboration of $4.0 million, of which $2.0 million was received in July 2014 and $2.0 million was received in January 2015.

The Company recognized collaboration revenues for the year ended December 31, 2014, of $0.9 million under this agreement. As of December 31, 2014 and 2013, $8.1 million and $5.0 million of deferred revenues were recorded in the consolidated balance sheet related to these agreements.

Kuraray Collaboration Agreement and Securities Purchase Agreement

In March 2014, the Company entered into the Second Amended and Restated Collaboration Agreement with Kuraray Co., Ltd (or Kuraray) in order to extend the term of the original agreement dated July 21, 2011 for an additional two years and add additional fields and products to the scope of development. In consideration for the Company’s agreement to extend the term of the original collaboration agreement and add additional fields and products, Kuraray will pay the Company $4.0 million in two equal installments of $2.0 million. The first installment was paid on April 30, 2014 and the second installment is due on April 30, 2015. In connection with the collaboration agreement, Kuraray signed a Securities Purchase Agreement in March 2014 to purchase 943,396 shares of the Company's common stock at a price per share of $4.24 per share. The Company issued 943,396 shares of its common stock at a price per share of $4.24 in April 2014 for aggregate cash proceeds of $4.0 million.

The Company recognized collaboration revenue for the year ended December 31, 2014, of $0.9 million under this agreement.

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 $40.4 million related to the write-off of $10.0 million in facility modification costs and the recognition of $30.4 million of fixed purchase commitments for the year ended December 31, 2012. 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 property, plant and equipment of $5.5 million related to Amyris-owned production equipment at contract manufacturing facilities in the year ended December 31, 2012.

Total loss on purchase commitments and write-off of property, plant and equipment for the years ended December 31, 2014, 2013 and 2012, were $1.8 million, $9.4 million and $45.9 million, respectively.

Tate & Lyle

In November 2010, the Company entered into a Contract Manufacturing Agreement (or the Contract Manufacturing Agreement) with Tate & Lyle, a USA affiliate of Tate & Lyle PLC. Tate & Lyle commenced production operations in the fourth quarter of 2011.

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 has 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, for the year ended December 31, 2013 the Company recorded a loss of $8.4 million which is included in the loss on purchase commitments and write-off of property, plant and equipment 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, 2014, the Company had no outstanding liability under the Termination Agreement.

Tonon Bioenergia (formerly known as Paraíso Bioenergia)

In March 2011, the Company entered into a supply agreement with Tonon, 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 facility to produce its products and Tonon 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 land owned by Tonon. 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 Tonon 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 Tonon to the Company under the lease agreement.

Albemarle

In July 2011, the Company entered into a contract manufacturing agreement with Albemarle Corporation (or Albemarle), to provide toll manufacturing services at its facility in Orangeburg, South Carolina. Under this agreement, Albemarle agreed to manufacture lubricant base oils from Biofene, to be owned and distributed by the Company or a Company-designated commercial partner. The initial term of this agreement was 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 were to 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 agreed to pay a one-time, non-refundable performance bonus of $5.0 million if Albemarle delivered to the Company certain quantity of the lubricant base stock by December 31, 2011 or $2.0 million if Albemarle delivered 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 for the final bonus payment 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, 2014, the Company has no outstanding liability payable to Albermarle.

9. Goodwill and Intangible Assets

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

		December 31, 2014			December 31, 2013		
	Useful Life in Years	Gross Carrying Amount	Accumulated Amortization and impairment	Net Carrying Value	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
In-process research and development	Indefinite	$8,560	$ (3,035)	$5,525	$8,560	$ —	$8,560
Acquired licenses and permits	2	772	(772)	—	772	(772)	—
Goodwill	Indefinite	560	—	560	560	—	560
		$9,892	$ (3,807)	$6,085	$9,892	$ (772)	$9,120

The following table presents the activity of goodwill and intangible assets for the year ended December 31, 2014 (in thousands):

	December 31, 2013 Net Carrying Value	Additions	Impairment	Amortization	December 31, 2014 Net Carrying Value
In-process research and development	$8,560	$—	$(3,035)	$—	$5,525
Acquired licenses and permits	—	—	—	—	—
Goodwill	560	—	—	—	560
	$9,120	$—	$(3,035)	$—	$6,085

The intangible assets acquired through the Draths acquisition in October 2011 of in-process research and development (IPR&D)of $8.6 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. During the fourth quarter of 2014, the Company updated its ongoing analysis of the technical and commercial viability of the IPR&D. The complex scientific and significant funding requirements of certain potential products, caused the Company to re-focus its research and development efforts on a narrower range of potential products. As a result of the change in strategy, the forecast discounted future cash flows of the IPR&D were updated. As a result of our assessment using the estimated discounted future cash flows of the IPR&D, we recorded an impairment to the value of the IPR&D assets for the years ended December 31, 2014 and 2013, of $3.0 million and zero, respectively. The impairment charge is recognized in "Impairment of intangible assets" in the consolidated statements of operations.

Acquired licenses and permits are amortized using a straight-line method over its estimated useful life. Amortization expense for this intangible was zero, $32,000 and $0.4 million for the year ended December 31, 2014, 2013 and 2012, respectively. As of December 31, 2014, acquired licenses and permits were fully amortized.

The Company has a single reportable segment (see Note 15, Reporting Segments" for further details). Consequently, all of the Company's goodwill is attributable to the single reportable segment.

10. Stockholders' Equity

Private Placement

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.

April 2014 Private Placement

In April 2014, the Company completed a private placement of 943,396 shares of its common stock at a price of $4.24 per share for aggregate proceeds of $4.0 million (see Note 8, "Significant Agreements").

Evergreen Shares for 2010 Equity Plan and 2010 ESPP

In January 2014, 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 3,833,141 and 766,628, respectively. These increases equal to 5% and 1%, respectively of 76,662,812 shares, the total outstanding shares of the Company’s common stock as of December 31, 2013. This automatic increase was effective as of January 1, 2014. 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 April 14, 2014 (Registration No. 333-195259) with respect to the shares added by the automatic increase on January 1, 2014.

Common Stock

As of December 31, 2014 and 2013, the Company was authorized to issue 300,000,000 and 200,000,000 shares of common stock, respectively, pursuant to the Company’s certificate of incorporation, as amended and restated (in May 2014, the Company filed an amended and restated certificate of incorporation to increase the shares of common stock authorized by the Company from 200,000,000 to 300,000,000 in connection with the approval by the Company's stockholders at the Company's 2014 annual meeting of stockholders). Holders of the Company’s common stock are entitled to dividends as and when declared by the Board, 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 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. As of December 31, 2014 and December 31, 2013, the Company had zero shares of 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, amortizing them 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, 2014.

In October 2013, in connection with the issuance of the Tranche I Notes (see Note 5, "Debt"), the Company issued to Temasek 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 Tranche I Notes. 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, 2014.

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, 2014 and 2013, no warrants were exercised through the cashless exercise provision.

As of both December 31, 2014 and 2013, the Company had 1,021,087 of unexercised common stock warrants.

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 1,923,593 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, 2014 and 2013, options to purchase 8,692,818 and 6,334,836 shares, respectively, of the Company's common stock granted from the 2010 Equity Plan were outstanding. As of December 31, 2014 and 2013, 5,133,576 and 4,351,596 shares, respectively, 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, 2014 and 2013 had a weighted-average exercise price of approximately $5.72 per share and $7.04 per share, respectively.

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 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. The options generally vested over 5 years.

As of December 31, 2014 and 2013, options to purchase 1,787,160 and 2,014,769 shares, respectively, 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, 2014 and 2013 had a weighted-average exercise price of approximately $8.04 per share and $8.59 per share, respectively.

2010 Employee Stock Purchase Plan

The 2010 Employee Stock Purchase Plan (or 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. 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, 2014 and 2013, 352,816 and 472,039 shares, respectively, of the Company's common stock were purchased under the 2010 ESPP. At December 31, 2014 and 2013, 815,569 and 401,757 shares, respectively, 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, 2014 was as follows:

	Number Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Outstanding - December 31, 2013	8,409,605	$7.39	7.40	$ 12,393
Options granted	3,723,791	$3.48		
Options exercised	(426,674)	$3.13		
Options cancelled	(1,166,744)	$8.12		
Outstanding - December 31, 2014	10,539,978	$6.10	7.22	$ 50
Vested and expected to vest after December 31, 2014	9,809,190	$6.29	7.10	$ 50
Exercisable at December 31, 2014	5,067,030	$8.48	5.75	$ 50

The aggregate intrinsic value of options exercised under all option plans was $0.6 million, $0.6 million and $2.7 million for the years ended December 31, 2014, 2013 and 2012, respectively, determined as of the date of option exercise.

The Company's restricted stock units (or RSUs) and restricted stock activity and related information for the year ended December 31, 2014 was as follows:

	RSUs	Weighted-Average Grant-Date Fair Value	Weighted Average Remaining Contractual Life (Years)
Outstanding - December 31, 2013	2,316,437	$ 4.30	0.88
Awarded	1,083,300	$ 3.51	—
Vested	(1,246,673)	$ 4.55	—
Forfeited	(177,561)	$ 3.24	—
Outstanding - December 31, 2014	1,975,503	$ 3.59	0.93
Expected to vest after December 31, 2014	1,779,174	$ 3.59	0.87

The following table summarizes information about stock options outstanding as of December 31, 2014:

	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—$2.79	1,540,022	7.71	$ 2.64	782,168	$ 2.59
$2.81—$2.94	1,056,280	6.76	$ 2.88	428,958	$ 2.88
$2.96—$3.37	1,152,334	8.60	$ 3.09	384,611	$ 3.07
$3.44—$3.44	99,450	9.11	$ 3.44	—	$ —
$3.51—$3.51	2,298,097	9.03	$ 3.51	—	$ —
$3.55—$3.86	1,087,193	7.84	$ 3.83	541,143	$ 3.84
$3.93—$4.31	1,391,698	4.29	$ 4.06	1,225,393	$ 4.07
$4.35—$20.41	1,403,842	5.63	$ 15.45	1,265,133	$ 15.55
$24.20—$26.84	451,062	6.15	$ 26.41	379,624	$ 26.37
$30.17—$30.17	60,000	6.20	$ 30.17	60,000	$ 30.17
$0.10—$30.17	10,539,978	7.22	$ 6.10	5,067,030	$ 8.48

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,		
	2014	2013	2012
Research and development	$3,508	$4,281	$6,451
Sales, general and administrative	10,597	13,766	21,022
Total stock-based compensation expense	$14,105	$18,047	$27,473

Employee Stock–Based Compensation

During the years ended December 31, 2014, 2013 and 2012, the Company granted options to purchase 3,683,791 shares, 2,849,919 shares, and 3,589,593 shares of its common stock, respectively, to employees with weighted-average grant date fair values of $2.31, $1.98, and $2.28 per share, respectively. Compensation expense of $10.1 million, $13.1 million, and $20.2 million was recorded for the years ended December 31, 2014, 2013 and 2012, respectively, for stock-based options granted to employees. As of December 31, 2014, 2013 and 2012, there were unrecognized compensation costs of $11.4 million, $15.0 million, and $51.2 million, respectively, related to these stock options. The Company expects to recognize those costs over a weighted-average period of 2.8 years and 2.7 years as of December 31, 2014 and 2013, respectively. 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, 2014, 2013 and 2012, 1,083,300, 1,222,250 and 2,956,900 of restricted stock units, respectively, were granted to employees with a weighted-average service-inception date fair value of $3.51, $2.85 and $3.46 per unit, respectively. The Company recognized a total of $3.3 million, $4.1 million and $6.3 million, respectively, in December 31, 2014, 2013 and 2012 in stock-based compensation expense for restricted stock units granted to employees. As of December 31, 2014, 2013 and 2012, there were unrecognized compensation costs of $3.6 million, $3.6 million and $7.8 million, respectively, related to these restricted stock units.

During the years ended December 31, 2014, 2013 and 2012, the Company also recognized stock-based compensation expense related to its 2010 ESPP of $0.5 million, $0.6 million, and $0.8 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,		
	2014	2013	2012
Research and development	$3,504	$4,278	$6,442
Sales, general and administrative	10,381	13,453	20,887
Total stock-based compensation expense	$13,885	$17,731	$27,329

Employee stock-based compensation expense recognized for the years ended December 31, 2014, 2013 and 2012 included $0.1 million, $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 zero, 458,424 and 825,523 shares of common stock and extend the exercise period for certain grants in the years ended December 31, 2014, 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 per share, 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.

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 expense 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,					
	2014		2013		2012	
Expected dividend yield	—	%	—	%	—	%
Risk-free interest rate	1.9	%	1.4	%	1.1	%
Expected term (in years)	6.1		6.1		6.0	

Expected volatility	75	%	82	%	77	%

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 options' expected terms.

Expected Term—Expected term represents the period that the Company's stock-based awards are expected to be outstanding. The Company's assumption about the expected term has been based on that of companies that have similar industry, life cycle, revenues, 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, 2014, 2013 and 2012, the Company granted options to purchase 40,000, 140,000 and 3,000 shares of its common stock, respectively, to nonemployees in exchange for services. Compensation expense of $0.2 million, $0.1 million and $0.1 million was recorded for the years ended December 31, 2014, 2013 and 2012, 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, 2014, 2013 and 2012, zero, zero and 10,000 restricted stock units, respectively, were granted to nonemployees and a total of $0.0 million, $0.1 million and $0.1 million in stock-based compensation expense was recognized by the Company for the years ended December 31, 2014, 2013 and 2012, respectively.

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

	Years Ended December 31,		
	2014	2013	2012
Expected dividend yield	— %	— %	— %
Risk-free interest rate	1.7 %	1.3 %	1.4 %
Expected term (in years)	5.8	4.8	7.0
Expected volatility	75 %	81 %	77 %

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.

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 (or IRS) restrictions. Effective January 2014, the Company implemented a discretionary employer match plan whereby the Company matches employee contributions for the year ended December 31, 2014 onwards up to the IRS limit or 90% of compensation, with a minimum one year of service required for vesting. The total matching amount for the year ended December 31, 2014, was $0.4 million.

13. Related Party Transactions

Letter Agreements with Total

In March 2013 and April 2014, respectively, the Company entered into letter agreements with Total that reduced the respective conversion prices of certain convertible promissory notes issuable under the Total Purchase Agreement, as described under “Related Party Convertible Notes” in Note 5, "Debt."

Related Party Financings

In March 2013, the Company completed a private placement of 1,533,742 shares of its common stock to an existing stockholder, 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.

In June 2013, the Company sold and issued a 1.5% Senior Unsecured Convertible Note to Total with a principal 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 with a principal 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. The initial closing of the August 2013 Financing was completed in October 2013 for the sale of approximately $42.6 million of the Tranche I Notes and the second closing of the August 2013 Financing for the sale of approximately $30.4 million of the Tranche II Notes was completed in January 2014 (the Company issued to Temasek $25.0 million of Tranche II Notes for cash and Total purchased approximately $6.0 million of Tranche II 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)). See “Related Party Convertible Notes” in 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 Tranche I Notes in the August 2013 Financing. See "Related Party Convertible Notes" in 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 (i) 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 and (ii) that all notes issued in connection with a third closing under the Total Purchase Agreement will be senior secured convertible notes instead of senior unsecured convertible notes (see "Related Party Convertible Notes" in 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 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").

In April 2014, the Company and Total entered into the March 2014 Total Letter Agreement under which the Company agreed to, (i) amend the conversion price of the convertible notes to be issued in the third closing under the Total Purchase Agreement from $7.0682 per share to $4.11 per share subject to stockholder approval at the Company's 2014 annual meeting (which was obtained in May 2014), (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 the Company shall have raised $75.0 million of equity and/or 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 third closing sale, and (iv) beginning on March 31, 2014, 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 third closing notes if it had decided not to proceed with the collaboration and made a "No-Go" decision with respect thereto.

In May 2014, the Company sold and issued 144A Notes pursuant to the 144A Offering. In connection with obtaining a waiver from one of its existing investors, Total, of its preexisting contractual right to exchange certain senior secured convertible notes previously issued by Amyris for new notes issued in the 144A Offering, Amyris used approximately $9.7 million of the net proceeds of the 144A Offering to repay such amount of previously issued notes (representing the amount of notes purchased by Total from the Initial Purchaser under the 144A Offering). Additionally, Foris Ventures, LLC (a fund affiliated with John Doerr) and Temasek each participated in the Rule 144A Convertible Note Offering and purchased $5.0 million and $10.0 million, respectively, of the convertible promissory notes sold thereunder (see "Related Party Convertible Notes" in Note 5, “Debt").

In July 2014 , the Company sold and issued a 1.5% Senior Secured Convertible Note to Total with a principal amount of $10.85 million with a March 1, 2017 maturity date pursuant to the Total Purchase Agreement as discussed under "Related Party Convertible Notes" in Note 5, "Debt." This sale constituted the initial tranche of the $21.7 million third closing under the Total Purchase Agreement. This convertible note has an initial conversion price equal to $4.11 per share of the Company's common stock.

As of December 31, 2014 and 2013, convertible notes with related parties were outstanding in aggregate principal amount of $115.2 million and $89.5 million, respectively, net of debt discount of $53.8 million and $23.9 million, respectively. The Company recorded losses of $10.5 million, $19.9 million and $0.9 million from extinguishment of debt from the settlement, exchange and/or cancellation of related party convertible notes for the years ended December 31, 2014, 2013 and 2012, respectively (see "Related Party Convertible Notes" in Note 5, "Debt" for details).

The fair value of derivative liabilities related to the related party convertible notes as of December 31, 2014 and 2013 were $39.8 million and $116.8 million, respectively. The Company recognized a gain from change in fair value of the derivative instruments of $141.2 million for the year ended December 31, 2014, a loss from change in fair value of the derivative instruments of $76.2 million for the year ended December 31, 2013, and a gain from change in fair value of the derivative instruments of $3.1 million for the year ended December 31, 2012, respectively, related to these derivative liabilities (see Note 3, "Fair Value of Financial Instruments").

Related Party Revenues

The Company recognized revenues from product sales to Novvi (an equity accounted affiliate) of $0.1 million, $1.1 million and zero for the years ended December 31, 2014, 2013 and 2012, respectively. The Company recognized revenues from research and development activities that it has performed on behalf of Novvi of zero, $2.6 million and zero for the years ended December 31, 2014, 2013 and 2012, respectively. Accounts receivable from Novvi as of December 31, 2014 and 2013, were $0.1 million and $0.3 million, respectively (see Note7, Joint Venture and Noncontrolling Interest" for further details).

The Company recognized related party revenue from product sales to Total of $0.6 million, $0.2 million and zero for the years ended December 31, 2014, 2013 and 2012, respectively. The Company recognized related party collaboration revenue from Total of zero, zero and $9.8 million for the years ended December 31, 2014, 2013 and 2012. Related party accounts receivable from Total as of December 31, 2014 and 2013, were $0.3 million and $0.2 million, respectively.

Loans to Related Parties

See Note 7, "Joint Ventures and Noncontrolling Interest" for details of the Company's loans to its affiliate, Novvi LLC.

Joint Venture with Total

In November 2013, the Company and Total formed JVCO as discussed above under Note 7, "Joint Venture and Noncontrolling Interest."

Pilot Plant Agreements

In May 2014, the Company received the final consents necessary for the Pilot Plant Services Agreement (or Pilot Plant Services Agreement) and a Sublease Agreement (or the Sublease Agreement), each dated as of April 4, 2014 (collectively the Pilot Plant Agreements), between the Company and Total. The Pilot Plant Agreements generally have a term of five years. Under the terms of the Pilot Plant Services Agreement, the Company agreed to provide certain fermentation and downstream separations

scale-up services and training to Total and receives an aggregate annual fee payable by Total for all services in the amount of up to approximately $0.9 million per annum. Under the Sublease Agreement, the Company receives an annual base rent payable by Total of approximately $0.1 million per annum. As of December 31, 2014, the Company had received $1.0 million in cash under the Pilot Plant Agreements from Total. In connection with these arrangements, a sublease payment of $0.1 million and service fees of $0.7 million were offset against cost and operating expenses for the year ended December 31, 2014. As of December 31, 2014, $0.2 million of cash received under the Pilot Plant Agreements from Total was recorded as "Accrued and other current liabilities" on the consolidated balance sheet.

14. Income Taxes

For the years ended December 31, 2014 and 2012, the Company recorded a provision from income taxes of $0.5 million and $1.0 million, respectively and for the year ended December 31, 2013, the Company recorded a benefit for income taxes of $0.8 million. The provision for income taxes for the years ended December 31, 2014 and 2012, generally relates to accrued withholding taxes that would be due in connection with the payment of interest on intercompany loans. 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. 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 income (loss) before income taxes, loss from investment in affiliate and noncontrolling interest are as follows for the years ended December 31, 2014, 2013 and 2012 (in thousands):

	Years Ended December 31,		
	2014	2013	2012
United States	$10,847	$(216,583)	$(146,028)
Foreign	(5,275)	(19,171)	(59,024)
Income (loss) before income taxes and loss from investment in affiliate	$5,572	$(235,754)	$(205,052)

The components of the provision for (benefit from) income taxes are as follows for the years ended December 31, 2014, 2013 and 2012 (in thousands):

	Years Ended December 31,		
	2014	2013	2012
Current:			
Federal	$—	$—	$—
State	—	—	—
Foreign	495	(847)	981
Total current provision (benefit)	495	(847)	981
Deferred:			
Federal	—	—	
State	—	—	—
Foreign	—	—	—
Total deferred provision (benefit)	—	—	—
Total provision (benefit) for income taxes	$495	$(847)	$981

A reconciliation between the statutory federal income tax and the Company's effective tax rates as a percentage of income (loss) before income taxes is as follows:

	Years Ended December 31,		
	2014	2013	2012
Statutory tax rate	(34.0)%	(34.0)%	(34.0)%
State tax rate, net of federal benefit	23.3 %	(0.7)%	(0.3)%

Stock-based compensation	(2.8)%	0.1 %	0.2 %
Federal R&D credit	31.0 %	(0.8)%	— %
Derivative liabilities	541.5 %	13.9 %	1.3 %
Other	(7.8)%	(0.6)%	0.2 %
Foreign losses	32.3 %	(1.4)%	(5.8)%
Change in valuation allowance	(592.4)%	23.1 %	38.8 %
Effective income tax rate	(8.9)%	(0.4)%	0.4 %

Temporary differences and carryforwards that gave rise to significant portions of deferred taxes are as follows (in thousands):

	December 31,		
	2014	2013	2012
Net operating loss carryforwards	$195,536	$167,354	$145,324
Fixed assets	1,299	822	—
Research and development credits	14,701	11,654	7,259
Foreign Tax Credit	1,431	935	1,782
Accruals and reserves	16,425	17,893	15,997
Stock-based compensation	18,773	17,521	15,882
Capitalized start-up costs	13,095	15,133	16,070
Capitalized research and development costs	56,880	45,968	26,850
Other	6,700	6,741	7,649
Total deferred tax assets	324,840	284,021	236,813
Fixed assets	—	—	(525)
Debt discount and derivative	(12,517)	—	—
Total deferred tax liabilities	(12,517)	—	(525)
Net deferred tax asset prior to valuation allowance	312,323	284,021	236,288
Less: Valuation allowance	(312,323)	(284,021)	(236,288)
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, 2014 and 2013. The valuation allowance increased by $28.3 million, $47.7 million, and $79.5 million, during the years ended December 31, 2014, 2013 and 2012, respectively.

As of December 31, 2014 and 2013, the Company had federal net operating loss carryforwards of approximately $525.6 million and $440.4 million, respectively, and state net operating loss carryforwards $200.7 million and $198.3 million, respectively, available to reduce future taxable income, if any. As of December 31, 2014 and 2013, approximately $27.1 million and $25.8 million, respectively, of the federal loss carryforwards and $13.8 million and $12.8 million, respectively, of state net operating loss carryforwards, 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 $8.5 million and $6.7 million and California research and development credit carryforwards of $9.4 million and $7.5 million, at December 31, 2014 and 2013, respectively.

The Tax Reform Act of 1986 (or the TRA) 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 in the TRA, 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 December 2014, the Tax Increase Prevention Act of 2014 (or the TIPA) was signed into law. The TIPA retroactively extended the research tax credit, that expired at the end of 2013, to the beginning of 2014. Under ASC 740, Accounting for Income Taxes, the effects of the tax legislation are recognized upon enactment. The benefit of the reinstated credits did not impact the income statement in 2014, as the research and development credit carryforwards are fully offset by a full valuation allowance.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

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
Increases in tax positions for prior period	4,736
Increases in tax positions during current period	6,265
Balance at December 31, 2014	$17,081

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, 2014 or December 31, 2013.

None of the tax benefits, if recognized, would affect the effective income tax rate for any of the above years 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, returns for 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, 2014, the US Internal Revenue Service (or 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 revenues 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 revenues and long-lived assets by geographic area (in thousands):

Revenues

	Years Ended December 31,		
	2014	2013	2012
United States	$21,331	$21,235	$49,111
Brazil	5,961	4,071	3,786
Europe	9,738	10,340	16,461
Asia	6,244	5,473	4,336
Total	$43,274	$41,119	$73,694

Long-Lived Assets

	December 31,	
	2014	2013
United States	$44,418	$54,015
Brazil	74,197	85,891
Europe	365	685
Total	$118,980	$140,591

16. Subsequent Events

Nomis Bay Ltd. Common Stock Purchase Agreement

In February 2015, the Company entered into a Common Stock Purchase Agreement (or the Common Stock Purchase Agreement) and a Registration Rights Agreement (or the Registration Rights Agreement) with Nomis Bay Ltd. (or Nomis Bay) under which the Company may from time to time sell up to $50.0 million of its common stock to Nomis Bay over a 24-month period. In connection with such Common Stock Purchase Agreement and Registration Rights Agreement, the Company also entered into a Placement Agent Letter Agreement (or the Placement Agent Agreement) with Financial West Group (or FWG) (collectively, the Common Stock Purchase Agreement, the Registration Rights Agreement and the Placement Agent Agreement are referred to as the Committed Equity Facility Agreements). The equity commitment arrangement entered into under the Committed Equity Facility Agreements is sometimes referred to as a committed equity line financing facility. Subject to customary covenants and conditions, from time to time over the 24-month term, and in the Company's sole discretion, the Company may present Nomis Bay with up to 24 draw down notices requiring Nomis Bay to purchase a specified dollar amount of shares of the Company's common stock, based on the price per share per day over 10 consecutive trading days (or a Draw Down Period). The per share purchase price for these shares equals the daily volume weighted average price of the Company's common stock on each date during the Draw Down Period on which shares are purchased, less a discount ranging from 3.0% to 6.25%. The maximum amount of shares that may be sold in any Draw Down Period ranges from shares having aggregate purchase prices of $325,000 to $3,250,000, based on the per share price described in the preceding sentence. Alternatively, in the Company's sole discretion, but subject to certain limitations, the Company may require Nomis Bay to purchase a percentage of the daily trading volume of the Company's common stock for each trading day during the Draw Down Period. The Company will not sell under the Purchase Agreement a number of shares of voting common stock which, when aggregated with all other shares of voting common stock then beneficially owned by Nomis Bay and its affiliates, would result in the beneficial ownership by Nomis Bay or any of its affiliates of more than 9.9% of the then issued and outstanding shares of common stock.

Under the Committed Equity Facility Agreements, the Company agreed to pay up to $35,000 of Nomis Bay's legal fees and expenses. The Company also agreed to pay Nomis Bay a commitment fee of $0.1 million which was paid at the signing of the Purchase Agreement, and would be required to pay an additional $0.3 million to Nomis Bay prior to the first draw down under the facility, should the Company elect to make any draw downs thereunder. The issuance of the shares of common stock to Nomis Bay would be exempt from registration under the Securities Act pursuant to the exemption for transactions by an issuer not involving a public offering. The Company agreed to indemnify Nomis Bay and its affiliates for losses related to a breach of the representations and warranties by the Company under the Committed Equity Facility Agreements and the other transaction documents, or any action instituted against Nomis Bay or its affiliates due to the transactions contemplated by the Committed Equity Facility Agreements or other transaction documents, subject to certain limitations.

Under the registration Rights Agreement, the Company granted to Nomis Bay certain registration rights related to the shares issuable in accordance with the Common Stock Purchase Agreement and agreed to use its commercially reasonable efforts to prepare and file with the SEC one or more registration statements for the purpose of registering the resale of the maximum shares of common stock issuable pursuant to the Common Stock Purchase Agreement.

Under the Placement Agent Agreement, the Company agreed to pay FWG a fee not to exceed $15,000 in the aggregate for FWG's reasonable attorney's fees and expenses incurred in connection with the transaction.

Naxyris Securities Purchase Agreement

On March 30, 2015, the Company entered into a Securities Purchase Agreement (or the Naxyris SPA) for the sale of up to $10.0 million in principal amount of an unsecured convertible note of the Company (or the Naxyris Note) to Naxyris, S.A. (or Naxyris), an existing holder of more than 5% of the Company's outstanding common stock (beneficially owning 5,639,398 shares

of the Company’s common stock as of March 15, 2015). Naxyris is an affiliate of Carole Piwnica, a member of the Company’s Board of Directors who was designated by Naxyris to serve on the Company's Board of Directors under a February 2012 letter agreement among the Company, Naxyris and certain other investors in the Company. The Naxyris SPA contemplates that the Nexyris Note may be issued in one closing to occur at the option of the Company at any time prior to the earlier of March 31, 2016 or the Company completing a new financing (or series of financings) of equity, debt or similar instruments in the amount of at least $10.0 million in the aggregate (excluding amounts that may be raised under existing commitments and agreements in existence as of March 30, 2015), following the satisfaction of certain closing conditions, including the receipt of certain third party consents, and requires that the Company pay a commitment availability fee of $0.2 million to Naxyris on April 1, 2015.

The Company may prepay the Naxyris Note (if issued) at any time, and if not prepaid, the Naxyris Note is due on the earlier of May 31, 2016 or earlier termination (e.g. in the event of a new capital financing described above) (or the Maturity Date). The Naxyris Note accrues interest at a rate of 11.0% per annum compounding quarterly and payable with the principal at maturity. Upon any draw of the Naxyris Note, the Company would be obligated to pay Naxyris a borrowing fee equal to $0.3 million (or the Borrowing Fee). The Borrowing Fee would not be due if the Company does not elect to draw the Naxyris Note under the facility.

The Naxyris Note, including the Borrowing Fee and any accrued interest, would be convertible, at Naxyris’ election, into the Company’s common stock any time after the Maturity Date, at a conversion price per share equal to $2.35, the last consolidated closing bid price of the Company’s common stock on NASDAQ prior to the Company’s entry into the Naxyris SPA, subject to adjustment based on proportional adjustments to outstanding common stock and certain dividends and distributions. The Naxyris Note includes standard covenants and events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, and breaches of the covenants in the Naxyris SPA and Naxyris Note.

The Naxyris SPA also requires the Company, at or prior to any closing thereunder, to enter into an Amendment No. 6 to the Amended and Restated Investors’ Rights Agreement (or the Rights Agreement Amendment and the underlying agreement, as amended, the Rights Agreement), and, under the Naxyris Note, unless waived by Naxyris, the Company agreed to use its commercially reasonable efforts to register the common stock issuable upon conversion of the Naxyris Note in accordance with the Rights Agreement if the Naxyris Note is not repaid by the Maturity Date. Under the Rights Agreement, certain holders of the Company’s outstanding securities can request the filing of a registration statement under the Securities Act of 1933 or (the Act), as amended (or the Act), covering the shares of common stock held by (or issued upon conversion of other Company securities, including the Naxyris Note, the requesting holders. Further, under the Rights Agreement, if the Company registers securities for public sale, the Company's stockholders with registration rights under the Rights Agreement have the right to include their shares of the Company's common stock in the registration statement. The Rights Agreement Amendment would extend such rights under the Rights Agreement to the common stock issuable upon conversion of the Naxyris Note.

The proposed sale and issuance of the Naxyris Note is intended to be exempt from registration under the Act in reliance on Section 4(2) of the Act and Rule 506 of Regulation D promulgated under the Act.

March 2015 Amendment of Hercules Loan Facility

On March 31, 2015, the Company and Hercules Technology Growth Capital, Inc. (or Hercules), as agent and lender entered into a second amendment (or the Second Amendment) of that certain Loan and Security Agreement entered into on March 29, 2014 (or the Original Hercules Agreement), as first amended (or the First Amendment) on June 12, 2014 (or the Original Hercules Agreement, as amended by the First Amendment and the Second Amendment, the Hercules Loan Facility). The Original Hercules Agreement and the First Amendment are described in more detail in Note 5, "Debt". Pursuant to the Original Hercules Agreement and the First Amendment, Hercules provided a loan

facility in the aggregate principal amount of up to $30.0 million to the Company, and the Company has borrowed the full amount available as of December 31, 2014.

Pursuant to the Second Amendment, the parties agreed to, among other things, establish an additional credit facility in the principal amount of up to $15.0 million, which would be available to be drawn by the Company at its sole election (in increments of $5.0 million) through the earlier of March 31, 2016 or such time as the Company raises an aggregate of at least $20.0 million through the sale of new equity security, subject to certain conditions, including the receipt of third party consents and a requirement to first make certain draw-downs under an equity line of credit that the Company previously secured (to the extent the Company is permitted to do so under the terms thereof). Commencing with the quarter in which the Company borrows any amounts under this additional facility, the Company becomes subject to a covenant to achieve certain amounts of product revenue. Under the terms of the Second Amendment, the Company agreed to pay Hercules a 3.0% facility availability fee on April 1, 2015. If the facility is not canceled, and any outstanding borrowings repaid, before June 30, 2015, an additional 5.0% facility fee becomes payable on June 30, 2015. The Company has the ability to cancel the additional facility at any time prior to June 30, 2015 at its own option, and the additional facility would terminate upon the Company securing a new equity financing of at least $20.0 million. Any amounts drawn under the Second Amendment would accrue 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% and would be payable on a monthly basis. Additionally, the Company would be required to pay an end of term charge of 10.0% of any amounts drawn under the facility.

Any amounts drawn under the Second Amendment would be secured by the same liens provided for in the Original Hercules Agreement and the First Amendment, including a lien on certain Company intellectual property.

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, 2014. 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 income (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, 2014				
Total revenues	$6,041	$9,307	$16,341	$11,585
Product sales	$2,845	$4,410	$11,480	$4,704
Gross profit (loss) from product sales	$(3,391)	$(3,101)	$1,334	$(4,605)
Net income (loss) attributable to common stockholders	$16,385	$(35,479)	$(36,641)	$58,021
Net income (loss) per share:				
Basic	$0.21	$(0.45)	$(0.46)	$0.73
Diluted	(0.34)	$(0.45)	$(0.46)	(0.21)
Shares used in calculation:				
Basic	76,830,388	78,604,692	78,980,402	79,148,281
Diluted	117,097,976	78,604,692	78,980,402	146,804,047
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 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

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 (CEO) and Chief Financial Officer (CFO), 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 CEO and CFO concluded that, as of December 31, 2014, 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 CEO and CFO, 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, 2014, the end of our fiscal year. Management based its assessment on criteria established in "Internal Control-Integrated Framework" (2013) 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, 2014, our internal control over financial reporting was effective. The effectiveness of the Company's internal control over financial reporting as of December 31, 2014 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, 2014 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 2014 annual meeting of stockholders, pursuant to Regulation 14A of the Exchange Act, also referred to in this Form 10-K as our 2015 Proxy Statement, which we expect to file with the SEC no later than April 30, 2015.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information appearing in our 2015 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 2015 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 2015 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 2015 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 2015 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, 2014, 2013 and 2012
(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, 2014	$284,021	$28,302	$—	$312,323
Year ended December 31, 2013	$236,288	$47,733	$—	$284,021
Year ended December 31, 2012	$156,765	$79,523	$—	$236,288

	Balance at Beginning of Period	Additions	Write-off/ Adjustments	Balance at End of Period
Allowance for Doubtful Accounts:				
Year ended December 31, 2014	$479		$—	$479
Year ended December 31, 2013	$481		$(2)	$479
Year ended December 31, 2012	$245	$236	$—	$481

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		Previously Filed				Filed
No.	Description	Form	File No.	Filing Date	Exhibit	Herewith
3.01	Restated Certificate of Incorporation	10-Q	001-34885	November 10, 2010	3.01	
3.02	Certificate of Amendment dated May 12, 2014 to Restated Certificate of Incorporation	10-Q	001-34887	August 8, 2014	3.02	
3.03	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	10-K	001-34885	April 2, 2014	4.06	
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	10-K	001-34885	April 2, 2014	4.07	
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.	10-K	001-34885	April 2, 2014	4.09	
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	
4.11	Agreement, dated February 23, 2012, among registrant, Maxwell (Mauritius) Pte Ltd,	10-Q	001-34885	May 9, 2012	4.02	

	Naxyris SA, Biolding Investment SA and Sualk Capital Ltd.				
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 4.12 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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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	
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[d]	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[d]	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	
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 dated October 16, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.24	
4.25	Tranche I Note Amendment and Amendment No. 2 dated December 24, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.25	
4.26	Securities Purchase Agreement, dated March 28, 2014 between registrant and Kuraray Co. Ltd.	10-Q	001-34885	May 9, 2014	4.01	
4.27	Loan and Security Agreement, dated March 29, 2014 between registrant and Hercules Technology Growth Capital, Inc.	10-Q	001-34885	May 9, 2014	4.02	
4.28	First Amendment dated June 12, 2014, to Loan and Security Agreement dated March 29, 2014 between registrant and Hercules	10-Q	001-34885	August 8, 2014	4.06	

	Technology Growth Capital, Inc.				
4.29	Letter Agreement, dated March 29, 2014 between registrant and Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.03
4.30	5% Unsecured Convertible Note dated October 13, 2013 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.04
4.31	1.5% Unsecured Convertible Note dated December 2, 2013 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.05
4.32	10% Unsecured Convertible Note dated January 15, 2014 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.06
4.33[d]	Amended and Restated Letter Agreement re: Certain Registration Rights dated May 8, 2014 between registrant and the purchasers listed therein	10-Q	001-34885	August 8, 2014	4.01

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
4.34	6.5% Convertible Senior Note due 2019 dated May 29, 2014 issued by registrant to Morgan Stanley & Co. LLC	10-Q	001-34885	August 8, 2014	4.02	
4.35[c]	6.5% Convertible Senior Note due 2019 dated May 29, 2014 issued by registrant to Maxwell (Mauritius) Pte Ltd.	10-Q	001-34885	August 8, 2014	4.03	
4.36[d]	1.5% Unsecured Convertible Note dated May 29, 2014 issued by registrant to Total Energies Nouvelles Activités USA	10-Q	001-34885	August 8, 2014	4.04	
4.37	Indenture dated May 29, 2014 between registrant and Wells Fargo Bank, National Association, as Trustee	8-K	001-34885	May 29, 2014	4.01	
4.38[d]	1.5% Senior Secured Convertible Note due 2017 dated July 31, 2014 issued by registrant to Total Energies Nouvelles Activités USA	10-Q	001-34885	November 7, 2014	4.01	
10.01[g]	Form of Indemnity Agreement between registrant and its directors and officers	S-1	333-166135	June 23, 2010	10.01	
10.02[d]	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	
10.03[e]	Modification No. 13 dated October 10, 2014 to Technology Investment Agreement between registrant and The Defense Advanced Research Project Agency (DARPA)					X
10.04	Modification No. 14 dated November 25, 2014 to Technology Investment Agreement between registrant and The Defense Advanced Research Project Agency (DARPA)					X
10.05[df]	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	
10.06[d]	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	
10.07[f]	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	
10.08[f]	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	
10.09[f]		10-Q	001-34885	August 8, 2012	10.02	

	Addendum to the Banking Credit Form, dated May 17, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.				
10.10[f]	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
10.11[df]	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
10.12[df]	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
10.13[df]	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
10.14[f]	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
10.15	Corporate Guarantee, dated July 13, 2012, issued by registrant to Nossa Caixa Desenvolvimento	10-Q	001-34885	November 9, 2012	10.04

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.16	Corporate Guarantee, dated July 13, 2012, issued by registrant to Banco Pine S.A.	10-Q	001-34885	November 9, 2012	10.05	
10.17[d]	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	
10.18[d]	First Amendment dated January 27, 2014 to the Joint Venture Agreement dated April 14, 2010, among Registrant, Amyris Brasil, Ltda, and Usina São Martinho S.A.	10-Q	001-34885	May 9, 2014	10.01	
10.19[d]	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	
10.20[d]	Articles of Association of Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.22	
10.21[d]	Shareholders Agreement dated December 2, 2013	10-K	001-34885	April 2, 2014	10.23	
10.22[d]	License Agreement dated December 2, 2013 between registrant and Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.24	
10.23[d]	Pledge of Shares dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.25	
10.24[d]	Escrow Agreement dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Stichting Total Amyris BioSolutions	10-K	001-34885	April 2, 2014	10.26	
10.25[d]	1.5% Senior Secured Convertible Note dated December 2, 2013 issued by registrant to Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.27	
10.26	Letter Agreement re: Waiver of Debt Covenants dated December 24, 2013 between registrant and Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.28	
10.27[d]	Amended and Restated Master Framework Agreement, dated December 2, 2013, between Amyris and Total Gas & Power USA, SAS	10-K	001-34885	April 2, 2014	10.29	
10.28	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	10-K	001-34885	April 2, 2014	10.30	
10.29	Letter Agreement dated October 4, 2013 between registrant and Total Energies	10-K	001-34885	April 2, 2014	10.31	

	Nouvelles Activités USA				
10.30	Amendment dated December 1, 2013 to Letter Agreement dated October 4, 2013 between registrant and Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.32
10.31	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
10.32	Amendment No. 1 dated October 16, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.24
10.33	Tranche I Note Amendment and Amendment No. 2 dated December 24, 2013, to the Securities Purchase Agreement dated August 8, 2013, between registrant and other parties therein	10-K	001-34885	April 2, 2014	4.25
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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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[d]	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[d]	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[d]	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[d]	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[d]	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[df]	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[df]	Lease Agreement, dated March 18, 2011, between Amyris Brasil Ltda. and Paraíso Bioenergia S.A.	10-K	001-34885	March 28, 2013	10.37	
10.45[df]	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	S-1	333-166135	April 16, 2010	10.18	

	Associates, LLC				
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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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	
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[df]	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	10.51	
10.62[g]	Offer Letter dated September 27, 2006 between registrant and John Melo	S-1	333-16135	April 16, 2010	10.27	
10.63[g]	Amendment, dated December 18, 2008, between registrant and John Melo	S-1	333-16135	April 16, 2010	10.28	
10.64[g]	Offer letter, dated January 17, 2008, between registrant and Paulo Diniz	S-1	333-16135	April 16, 2010	10.31	
10.65[eg]	Consulting Agreement dated December 6, 2013, between registrant and Steven R. Mills	10-Q	001-34885	August 8, 2014	10.05	
10.66[g]	Offer letter, dated September 30, 2008, between registrant and Joel Cherry	S-1	333-16135	April 16, 2010	10.29	
10.67[dgi]	Offer letter, dated February 6, 2013 between registrant and Susanna McFerson	10-Q	001-34885	May 9, 2014	10.03	
10.68[g]	Offer letter, dated October 23, 2014 between registrant and Raffi Asadorian					X
10.69[g]	2005 Stock Option/Stock Issuance Plan	10-Q	001-34885	November 9, 2011	10.02	
10.70[g]	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	
10.71[g]	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	
10.72[g]	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	
10.73[g]	Form of Stock Option Agreement under registrant's 2005 Stock Option/Stock Issuance	S-1	333-16135	April 16, 2010	10.41	

	Plan				
10.74[g]	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
10.75[g]	Form of Stock Purchase Agreement under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.43
10.76[g]	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
10.77[g]	2010 Equity Incentive Plan and forms of award agreements thereunder	S-1	333-16135	June 23, 2010	10.46
10.78[g]	2010 Employee Stock Purchase Plan and forms of award agreements thereunder	S-1	333-16135	September 20, 2010	10.45
10.79	Master Collaboration Agreement, dated March 13, 2013, between registrant and Firmenich SA	10-Q	001-34885	June 9, 2013	10.02
10.80	Letter agreement, dated March 24, 2013, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	June 9, 2013	10.03
10.81	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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.82	IP License Agreement, dated as of March 26, 2013, between registrant and Novvi LLC	10-Q	001-34885	June 9, 2013	10.06	
10.83[gi]	Amyris, Inc. Executive Severance Plan, effective November 6, 2013	10-K	001-34885	April 2, 2014	10.92	
10.84[gh]	Compensation arrangements between registrant and its non-employee directors	10-K	001-34885	April 2, 2014	10.93	
10.85[gi]	Compensation arrangements between registrant and its executive officers	10-K	001-34885	April 2, 2014	10.94	
10.86[d]	Pilot Plant Sublease dated April 4, 2014 between registrant and Total New Energies USA, Inc.	10-Q	001-34885	August 8, 2014	10.03	
10.87[d]	Pilot Plant Services Agreement dated April 4, 2014 between registrant and Total New Energies USA, Inc.	10-Q	001-34885	August 8, 2014	10.04	
21.01	List of subsidiaries					X
23.01	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm					X
23.02	Consent of Independent Auditors, Pannell Kerr Forster of Texas, P.C.					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[j]	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[j]	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
99.1	Novvi LLC Financial Statements December 31, 2014					X
101[k]	The following materials from registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014, formatted in XBRL (Extensible Business Reporting					X

	Language): (i) the Consolidated 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 of registrant's Form 10-Q filed November 9,2012) 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	Registrant issued substantially identical 6.5% Senior Convertible Notes due 2019 (the “6.5% Notes”) to Maxwell (Mauritius) Pte Ltd. (“Temasek”), Total Energies Nouvelles Activités USA, and Foris Ventures, LLC on May 29, 2014. Registrant has filed the 6.5% Note issued to Temasek, and has included, with Exhibit 4.35, a schedule (Schedule A to Exhibit 4.03 of registrant's Form 10-Q filed August 8, 2014) identifying each of the 6.5% Notes and setting forth the material details in which the other 6.5% Notes differ from the filed 6.5% Note (i.e., the note number, the purchasers, and the amounts of the 6.5% Notes).
d	Portions of this exhibit, which have been granted confidential treatment by the Securities and Exchange Commission, have been omitted.
e	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.
f	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).
g	Indicates management contract or compensatory plan or arrangement.
h	Description contained under the heading "Director Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 14, 2014 is incorporated herein by reference.
i	Description contained under the heading "Executive Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 14, 2014 is incorporated herein by reference.
j	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.
k	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 March 31, 2015.

Dated: March 31, 2015

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 Raffi Asadorian 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)	March 31, 2015
/s/ RAFFI ASADORIAN Raffi Asadorain	Chief Financial Officer (Principal Financial Officer)	March 31, 2015
/s/ KAREN WEAVER Karen Weaver	Vice President Finance (Principal Accounting Officer)	March 31, 2015
/s/ PHILIPPE BOISSEAU Philippe Boisseau	Director	March 12, 2015
/s/ NAM-HAI CHUA Nam-Hai Chua	Director	March 12, 2015
/s/ JOHN DOERR John Doerr	Director	March 11, 2015
/s/ GEOFFREY DUYK Geoffrey Duyk	Director	March 9, 2015
/s/ CAROL PIWNICA Carole Piwnica	Director	March 11, 2015
/s/ FERNANDO REINACH Fernando Reinach	Director	March 10, 2015
/s/ HH SHEIK ABDULLAH BIN KHALIFA AL THANI_____ HH Sheikh Abdullah bin Khalifa Al Thani	Director	March 31, 2015
/s/ R. NEIL WILLIAMS R. Neil Williams	Director	March 9, 2015
/s/ PATRICK YANG Patrick Yang	Director	March 9, 2015

EXHIBIT INDEX

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
3.01	Restated Certificate of Incorporation	10-Q	001-34885	November 10, 2010	3.01	
3.02	Certificate of Amendment dated May 12, 2014 to Restated Certificate of Incorporation	10-Q	001-34887	August 8, 2014	3.02	
3.03	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	10-K	001-34885	April 2, 2014	4.06	
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	10-K	001-34885	April 2, 2014	4.07	
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.	10-K	001-34885	April 2, 2014	4.09	
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	
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		S-3	333-180005	March 9, 2012	4.02	

	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)				
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 4.12 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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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	
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[d]	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[d]	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	
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 dated October 16, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.24	
4.25	Tranche I Note Amendment and Amendment No. 2 dated December 24, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.25	
4.26	Securities Purchase Agreement, dated March 28, 2014 between registrant and Kuraray Co. Ltd.	10-Q	001-34885	May 9, 2014	4.01	
4.27	Loan and Security Agreement, dated March 29, 2014 between registrant and Hercules Technology Growth Capital, Inc.	10-Q	001-34885	May 9, 2014	4.02	
4.28	First Amendment dated June 12, 2014, to Loan and Security Agreement dated March 29, 2014 between registrant and Hercules	10-Q	001-34885	August 8, 2014	4.06	

	Technology Growth Capital, Inc.				
4.29	Letter Agreement, dated March 29, 2014 between registrant and Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.03
4.30	5% Unsecured Convertible Note dated October 13, 2013 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.04
4.31	1.5% Unsecured Convertible Note dated December 2, 2013 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.05
4.32	10% Unsecured Convertible Note dated January 15, 2014 issued to Total Energies Nouvelles Activités USA	10-Q	001-34885	May 9, 2014	4.06
4.33[d]	Amended and Restated Letter Agreement re: Certain Registration Rights dated May 8, 2014 between registrant and the purchasers listed therein	10-Q	001-34885	August 8, 2014	4.01

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
4.34	6.5% Convertible Senior Note due 2019 dated May 29, 2014 issued by registrant to Morgan Stanley & Co. LLC	10-Q	001-34885	August 8, 2014	4.02	
4.35[c]	6.5% Convertible Senior Note due 2019 dated May 29, 2014 issued by registrant to Maxwell (Mauritius) Pte Ltd.	10-Q	001-34885	August 8, 2014	4.03	
4.36[d]	1.5% Unsecured Convertible Note dated May 29, 2014 issued by registrant to Total Energies Nouvelles Activités USA	10-Q	001-34885	August 8, 2014	4.04	
4.37	Indenture dated May 29, 2014 between registrant and Wells Fargo Bank, National Association, as Trustee	8-K	001-34885	May 29, 2014	4.01	
4.38[d]	1.5% Senior Secured Convertible Note due 2017 dated July 31, 2014 issued by registrant to Total Energies Nouvelles Activités USA	10-Q	001-34885	November 7, 2014	4.01	
10.01[g]	Form of Indemnity Agreement between registrant and its directors and officers	S-1	333-166135	June 23, 2010	10.01	
10.02[d]	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	
10.03[e]	Modification No. 13 dated October 10, 2014 to Technology Investment Agreement between registrant and The Defense Advanced Research Project Agency (DARPA)					X
10.04	Modification No. 14 dated November 25, 2014 to Technology Investment Agreement between registrant and The Defense Advanced Research Project Agency (DARPA)					X
10.05[df]	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	
10.06[d]	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	
10.07[f]	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	
10.08[f]	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	
10.09[f]		10-Q	001-34885	August 8, 2012	10.02	

	Addendum to the Banking Credit Form, dated May 17, 2012, between Amyris Brasil Ltda. and Banco Pine S.A.				
10.10[f]	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
10.11[df]	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
10.12[df]	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
10.13[df]	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
10.14[f]	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
10.15	Corporate Guarantee, dated July 13, 2012, issued by registrant to Nossa Caixa Desenvolvimento	10-Q	001-34885	November 9, 2012	10.04

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.16	Corporate Guarantee, dated July 13, 2012, issued by registrant to Banco Pine S.A.	10-Q	001-34885	November 9, 2012	10.05	
10.17[d]	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	
10.18[d]	First Amendment dated January 27, 2014 to the Joint Venture Agreement dated April 14, 2010, among Registrant, Amyris Brasil, Ltda, and Usina São Martinho S.A.	10-Q	001-34885	May 9, 2014	10.01	
10.19[d]	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	
10.20[d]	Articles of Association of Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.22	
10.21[d]	Shareholders Agreement dated December 2, 2013	10-K	001-34885	April 2, 2014	10.23	
10.22[d]	License Agreement dated December 2, 2013 between registrant and Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.24	
10.23[d]	Pledge of Shares dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Total Amyris BioSolutions B.V.	10-K	001-34885	April 2, 2014	10.25	
10.24[d]	Escrow Agreement dated December 2, 2013 among registrant, Total Energies Nouvelles Activités USA and Stichting Total Amyris BioSolutions	10-K	001-34885	April 2, 2014	10.26	
10.25[d]	1.5% Senior Secured Convertible Note dated December 2, 2013 issued by registrant to Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.27	
10.26	Letter Agreement re: Waiver of Debt Covenants dated December 24, 2013 between registrant and Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.28	
10.27[d]	Amended and Restated Master Framework Agreement, dated December 2, 2013, between Amyris and Total Gas & Power USA, SAS	10-K	001-34885	April 2, 2014	10.29	
10.28	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	10-K	001-34885	April 2, 2014	10.30	
10.29	Letter Agreement dated October 4, 2013 between registrant and Total Energies	10-K	001-34885	April 2, 2014	10.31	

	Nouvelles Activités USA				
10.30	Amendment dated December 1, 2013 to Letter Agreement dated October 4, 2013 between registrant and Total Energies Nouvelles Activités USA	10-K	001-34885	April 2, 2014	10.32
10.31	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
10.32	Amendment No. 1 dated October 16, 2013, to the Securities Purchase Agreement, dated August 8, 2013, between registrant and other parties named therein	10-K	001-34885	April 2, 2014	4.24
10.33	Tranche I Note Amendment and Amendment No. 2 dated December 24, 2013, to the Securities Purchase Agreement dated August 8, 2013, between registrant and other parties therein	10-K	001-34885	April 2, 2014	4.25
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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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[d]	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[d]	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[d]	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[d]	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[d]	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[df]	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[df]	Lease Agreement, dated March 18, 2011, between Amyris Brasil Ltda. and Paraíso Bioenergia S.A.	10-K	001-34885	March 28, 2013	10.37	
10.45[df]	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	S-1	333-166135	April 16, 2010	10.18	

	Associates, LLC				
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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
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	
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[df]	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	10.51	
10.62[g]	Offer Letter dated September 27, 2006 between registrant and John Melo	S-1	333-16135	April 16, 2010	10.27	
10.63[g]	Amendment, dated December 18, 2008, between registrant and John Melo	S-1	333-16135	April 16, 2010	10.28	
10.64[g]	Offer letter, dated January 17, 2008, between registrant and Paulo Diniz	S-1	333-16135	April 16, 2010	10.31	
10.65[eg]	Consulting Agreement dated December 6, 2013, between registrant and Steven R. Mills	10-Q	001-34885	August 8, 2014	10.05	
10.66[g]	Offer letter, dated September 30, 2008, between registrant and Joel Cherry	S-1	333-16135	April 16, 2010	10.29	
10.67[dgi]	Offer letter, dated February 6, 2013 between registrant and Susanna McFerson	10-Q	001-34885	May 9, 2014	10.03	
10.68[g]	Offer letter, dated October 23, 2014 between registrant and Raffi Asadorian					X
10.69[g]	2005 Stock Option/Stock Issuance Plan	10-Q	001-34885	November 9, 2011	10.02	
10.70[g]	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	
10.71[g]	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	
10.72[g]	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	
10.73[g]	Form of Stock Option Agreement under registrant's 2005 Stock Option/Stock Issuance	S-1	333-16135	April 16, 2010	10.41	

	Plan				
10.74[g]	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
10.75[g]	Form of Stock Purchase Agreement under registrant's 2005 Stock Option/Stock Issuance Plan	S-1	333-16135	April 16, 2010	10.43
10.76[g]	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
10.77[g]	2010 Equity Incentive Plan and forms of award agreements thereunder	S-1	333-16135	June 23, 2010	10.46
10.78[g]	2010 Employee Stock Purchase Plan and forms of award agreements thereunder	S-1	333-16135	September 20, 2010	10.45
10.79	Master Collaboration Agreement, dated March 13, 2013, between registrant and Firmenich SA	10-Q	001-34885	June 9, 2013	10.02
10.80	Letter agreement, dated March 24, 2013, between registrant and Total Gas & Power USA, SAS	10-Q	001-34885	June 9, 2013	10.03
10.81	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

Exhibit No.	Description	Previously Filed Form	File No.	Filing Date	Exhibit	Filed Herewith
10.82	IP License Agreement, dated as of March 26, 2013, between registrant and Novvi LLC	10-Q	001-34885	June 9, 2013	10.06	
10.83[gi]	Amyris, Inc. Executive Severance Plan, effective November 6, 2013	10-K	001-34885	April 2, 2014	10.92	
10.84[gh]	Compensation arrangements between registrant and its non-employee directors	10-K	001-34885	April 2, 2014	10.93	
10.85[gi]	Compensation arrangements between registrant and its executive officers	10-K	001-34885	April 2, 2014	10.94	
10.86[d]	Pilot Plant Sublease dated April 4, 2014 between registrant and Total New Energies USA, Inc.	10-Q	001-34885	August 8, 2014	10.03	
10.87[d]	Pilot Plant Services Agreement dated April 4, 2014 between registrant and Total New Energies USA, Inc.	10-Q	001-34885	August 8, 2014	10.04	
21.01	List of subsidiaries					X
23.01	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm					X
23.02	Consent Independent Auditors, Pannell Kerr Forster of Texas, P.C.					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[j]	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[j]	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
99.1	Novvi LLC Financial Statements December 31, 2014					X
101[k]	The following materials from registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014, formatted in XBRL (Extensible Business Reporting					X

	Language): (i) the Consolidated 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 of registrant's Form 10-Q filed November 9,2012) 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	Registrant issued substantially identical 6.5% Senior Convertible Notes due 2019 (the “6.5% Notes”) to Maxwell (Mauritius) Pte Ltd. (“Temasek”), Total Energies Nouvelles Activités USA, and Foris Ventures, LLC on May 29, 2014. Registrant has filed the 6.5% Note issued to Temasek, and has included, with Exhibit 4.35, a schedule (Schedule A to Exhibit 4.03 of registrant's Form 10-Q filed August 8, 2014) identifying each of the 6.5% Notes and setting forth the material details in which the other 6.5% Notes differ from the filed 6.5% Note (i.e., the note number, the purchasers, and the amounts of the 6.5% Notes).
d	Portions of this exhibit, which have been granted confidential treatment by the Securities and Exchange Commission, have been omitted.
e	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.
f	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).
g	Indicates management contract or compensatory plan or arrangement.
h	Description contained under the heading "Director Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 14, 2014 is incorporated herein by reference.
i	Description contained under the heading "Executive Compensation" in registrant's definitive proxy materials filed with the Securities and Exchange Commission on April 14, 2014 is incorporated herein by reference.
j	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.
k	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.