AMYRIS, INC.
Form S-3
March 09, 2012
Table of Contents

As filed with the Securities and Exchange Commission on March 9, 2012

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Amyris, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

55-0856151

(IRS Employer Identification Number)

5885 Hollis Street, Suite 100

Emeryville, CA 94608

(510) 450-0761

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

John G. Melo

President and Chief Executive Officer

5885 Hollis Street, Suite 100

Emeryville, CA 94608

(510) 450-0761

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all correspondence to:

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From time to time after the effectiveness of this registration statement.

(Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ¨

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ¨

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ¨

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

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per unit (2)	Proposed maximum aggregate offering price (2)	Amount of registration fee
Common Stock, $0.0001 par value per share	4,173,622	$4.73	$19,741,232.06	$2,263.00

(1) Pursuant to Rule 416 under the Securities Act of 1933, this Registration Statement shall also cover any additional shares of common stock which become issuable by reason of any stock dividend, stock split or other similar transaction effected without the receipt of consideration that results in an increase in the number of the outstanding shares of our common stock. The 4,173,622 shares referenced above represent the maximum amount of shares that are issuable under the unsecured senior convertible promissory notes held by the selling stockholders; provided that additional shares of common stock may become issuable in the event of any stock dividend, stock split or other similar transaction effected without the receipt of consideration that results in an increase in the number of the outstanding shares of our common stock.

(2) In accordance with Rule 457(c) under the Securities Act of 1933, the aggregate offering price of our common stock is estimated solely for the purpose of calculating the registration fees due for this filing. For the initial filing of this Registration Statement, this estimate was based on the average of the high and low sales price of our common stock reported by The NASDAQ Global Select Market on March 5, 2012, which was $4.73.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDERS MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND THE SELLING STOCKHOLDERS ARE NOT SOLICITING OFFERS TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION DATED MARCH 9, 2012

PROSPECTUS

4,173,622 Shares

AMYRIS, INC.

Common Stock

This prospectus relates to the offer and sale of up to 4,173,622 shares of our common stock under this prospectus by the selling stockholders identified in the Selling Stockholders section of this prospectus or their transferees, pledges, donees or successors in interest, which offer and sale is not being underwritten. The shares of common stock registered hereunder are issuable to the selling stockholders at their election upon conversion of certain senior unsecured convertible promissory notes issued to the selling stockholders pursuant to a Security Purchase Agreement, dated as of February 24, 2012 (the ***Note Agreement***), by and between us and the selling stockholders.

The selling stockholders or their pledges, donees, transferees or other successors in interest may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholders may sell shares of common stock in the section titled Plan of Distribution on page 32. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of these shares by the selling stockholders. We will pay the expenses incurred in registering the shares, including legal and accounting fees.

Our common stock is traded on the NASDAQ Global Select Market under the symbol AMRS. On March 5, 2012, the closing price of our common stock was $4.59.

Investing in our securities involves risks. See Risk Factors commencing on page 5. You should carefully read this prospectus, the documents incorporated herein, and, if applicable, any prospectus supplement subsequently filed with respect to this prospectus, before making any investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2012.

Table of Contents

TABLE OF CONTENTS

INFORMATION CONTAINED IN THIS PROSPECTUS	1
SUMMARY	2
RISK FACTORS	5
FORWARD-LOOKING STATEMENTS	29
USE OF PROCEEDS	29
SELLING STOCKHOLDERS	30
PLAN OF DISTRIBUTION	32
DESCRIPTION OF CAPITAL STOCK	34
LEGAL MATTERS	39
EXPERTS	39
WHERE YOU CAN FIND MORE INFORMATION	39
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	39

INFORMATION CONTAINED IN THIS PROSPECTUS

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and, if applicable, any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or, if applicable, any accompanying prospectus supplement. This prospectus and, if applicable, any accompanying prospectus supplement, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and, if applicable, any accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and, if applicable, any accompanying prospectus supplement, is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and, if applicable, any accompanying prospectus supplement, is delivered or securities are sold on a later date.

Table of Contents

SUMMARY

The following summary provides an overview of selected information related to this offering and does not contain all the information that you should consider before investing in our securities. You should carefully read this entire prospectus, including the risks of investing discussed under Risk Factors beginning on page 5, the financial statements and related notes and other information incorporated by reference in this prospectus, and, if applicable, any prospectus supplement or related free writing prospectus, and the additional information described under the captions Where You Can Find More Information and Incorporation of Certain Information by Reference, before buying securities in this offering. Unless the context otherwise requires, AMRS, the Company, we, us, our and similar names refer to Amyris, Inc. References to selling stockholders refer to the stockholders listed herein under the heading Selling Stockholders on page 30, who may sell shares from time to time as described in this prospectus.

About This Prospectus

The securities described in this prospectus are part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process to register 4,173,622 shares of our common stock, or the Shares. The Shares are issuable to the selling stockholders at the election of each selling stockholder to convert the unsecured senior convertible promissory notes issued to the selling stockholders pursuant to the Securities Purchase Agreement, dated February 24, 2012, by and between the Company and the selling stockholders and as described in the Current Report on Form 8-K filed by us with the SEC on February 28, 2012. The Shares are being registered for resale or other disposition by the selling stockholders or their pledges, donees, transferees or other successors in interest. We will not receive any proceeds from the sale or other disposition of the Shares registered hereunder, or interests therein.

About Amyris, Inc.

We are building an integrated renewable products company to provide sustainable alternatives to a broad range of petroleum-sourced products used in specialty chemical and transportation fuel markets worldwide. We do this by applying our industrial synthetic biology technology platform to modify microorganisms, primarily yeast, to function as living factories in established fermentation processes to convert plant-sourced sugars into a variety of hydrocarbon molecules that can serve as flexible building blocks to be used in a wide range of products. We intend to commercialize these products as renewable ingredients in six target markets: cosmetics, lubricants, flavors and fragrances, polymers and plastic additives, home and personal care products, and transportation fuels. We call these No Compromise products because we design them to perform comparably to or better than currently available products.

Our first technology success came through the development and application of our platform to create microbial strains that produce artemisinic acid, a precursor of artemisinin, an anti-malarial therapeutic. We granted a royalty-free license to this technology to Sanofi-Aventis, which currently expects to begin distributing artemisinin-based anti-malarial drugs made through our technology in 2012. Our first proprietary commercialization efforts have been focused on a molecule called farnesene, or Biofene, which can be used as-is or can be further converted by conventional chemical process into other renewable ingredients in consumer and industrial products, as well as serve as transportation fuels such as diesel. Our strategy is to focus our direct commercialization efforts on higher-value, lower-volume markets while moving lower-margin, higher-volume 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 large-market commodity products. To support this strategy, we have established a number of relationships, including:

- Development and commercialization agreements with an affiliate of Total S.A., or Total, which currently provides funding for our Biofene research program as well as the research and development of our jet and diesel fuels. Under these agreements, we intend to establish one or more joint ventures with Total to commercialize these products.

Table of Contents

A supply agreement with Petrobras Distribuidora S.A., or Petrobras, under which we sell diesel produced from Biofene to Petrobras who blends our diesel in fuel sold to city bus fleets in São Paulo and Rio de Janeiro, Brazil.

A joint venture agreement with an affiliate of Cosan Indústria e Comércio S.A., or Cosan, a leading producer of lubricants in Brazil, which established Novvi LLC, or Novvi, for the purpose of developing and commercializing base oils for use in finished lubricants products.

Development and commercialization agreements with Firmenich SA, or Firmenich, and Givaudan Schweiz AG, or Givaudan, global flavors and fragrances companies, focusing on key ingredients for the flavors and fragrances market.

A development agreement with Manufacture Francaise de Pneumatiques Michelin, or Michelin, focusing on development and commercialization of isoprene for use in tires.

Agreements with several entities for the development of Biofene for various industrial polymer or home and personal care applications, including (i) Kuraray Co., Ltd., or Kuraray, for the use of Biofene in certain polymer products, (ii) M&G Finanziaria S.R.L., or M&G, for use of Biofene in M&G s polyethylene terephthalate (PET) resins incorporated into containers for food, beverages and other products, (iii) Method Products, Inc., or Method, for the use of Biofene in home and personal care products, (iv) The Proctor & Gamble Company, or P&G, for the use of Biofene as an ingredient in certain household products, and (v) Wilmar Trading Pte. Ltd., or Wilmar, for the use of Biofene as a surfactant.

To support our manufacturing operations, we have established the following relationships:

For the production of Biofene, contract manufacturing agreements with (i) Biomin do Brasil Nutricão Animal Ltda., or Biomin, related to the use of a facility located in Piracicaba, Brazil, (ii) Antibióticos, S.A., or Antibióticos, for a production facility located in León, Spain, and (iii) Tate & Lyle Ingredients Americas, Inc., or Tate & Lyle, an affiliate of Tate & Lyle PLC in Decatur, IL, to produce Biofene.

For the conversion of Biofene into finished chemical products, agreements with (i) Glycotech, Inc., or Glycotech, related to the conversion of Biofene into squalane (a moisturizing ingredient used in cosmetics and other personal care products), industrial lubricants and other final products at a facility located in Leland, North Carolina, (ii) Dottikon Exclusive Synthesis, AG, or Dottikon, for production of squalane and Biofene-derived molecules for use as oxygen scavengers in PET polymers at a facility in Switzerland (pending completion of process development work), and (iii) Albemarle Corporation, or Albemarle, for production of Biofene-derived base oils at a facility in Baton Rouge, Louisiana (also pending completion of process development work).

For the future production of Biofene, a manufacturing agreement with Paraíso Bioenergia S.A., or Paraíso Bioenergia, in São Paulo State, Brazil, under which we are constructing fermentation and separation capacity to produce our products.

Our joint venture with Usina São Martinho, or São Martinho, a subsidiary of São Martinho S.A., one of the largest sugar and ethanol producers in Brazil, pursuant to which we are building our first stand-alone, large-scale production facility at the São Martinho sugar and ethanol mill located in São Paulo state, Brazil.

To support the expansion of our large-scale production capacity in Brazil, non-binding letters of intent with several leading Brazilian sugar and ethanol producers, including Usina Alvorada, or Alvorada, Cosan, ETH Bioenergia S.A., or ETH, and Acúcar Guarani S.A., or Acúcar Guarani.

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 intend to secure access to this feedstock, and expand our production capacity beyond our initial use of contract manufacturers, in a capital light manner through the production relationships we are establishing with sugar and ethanol producers in Brazil. With this approach, we expect to work with these entities to build new,

Table of Contents

bolt-on facilities adjacent to their existing mills instead of building entirely new greenfield facilities, thereby reducing the capital required to establish and scale our production.

We have two operating subsidiaries, Amyris Brasil Ltda. (formerly Amyris Brasil S.A.), or Amyris Brasil, and Amyris Fuels, LLC, or Amyris Fuels. Amyris Brasil oversees the establishment and expansion of Amyris s production in Brazil, and Amyris Fuels was established to help us develop fuel distribution capabilities in the U.S. Amyris Fuels currently generates revenue from the sale of ethanol and reformulated ethanol-blended gasoline to wholesale customers through a network of terminals in the eastern U.S. As of December 31, 2011, we had 493 employees worldwide, including 348 in Emeryville, California, 140 in Campinas and Piricicaba, Brazil, and 5 in Chicago, Illinois. We have also established a broad patent portfolio, including 66 issued patents and 279 patent applications pending worldwide as of February 15, 2012. This portfolio provides protection through coverage of composition of matter on many of our end products, our technology and research tools, and our manufacturing processes.

We were incorporated in 2003. We began selling fuels through our subsidiary Amyris Fuels in June 2008. Since inception we have generated $318.8 million in revenue, including $270.1 million from Amyris Fuels and substantially all of the remainder from grants and collaborations and to a lesser extent from product sales of our renewable products.

Our principal executive offices are located at 5885 Hollis Street, Suite 100, Emeryville, CA 94608 and our telephone number at that address is (510) 450-0761.

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

Table of Contents

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 prospectus, 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.

Additional risks and uncertainties beyond those set forth below, together with all of the other information set forth in this prospectus, and not presently known to us or that we currently deem immaterial may also affect our operations. Any risks and uncertainties, whether set forth in this prospectus or otherwise, could cause our business, financial condition, results of operations and future prospects to be materially and adversely harmed. The trading price of our common stock could decline due to any of these risks and uncertainties, and, as a result, you may lose all or part of your investment.

Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed below, together with all of the other information contained or incorporated by reference in this prospectus and, if applicable, any prospectus supplement.

Risks Related to Our Business

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

As of December 31, 2011, we had an accumulated deficit of $381.2 million. We expect to incur additional costs and expenses related to the continued development and expansion of our business, including our research and development operations, continued operation of our pilot plants and demonstration facility, engineering and design work. Further, we expect to incur costs related to implementation of multiple contract manufacturing arrangements, including equipment purchases, facility construction and technology transfer, as well as those related to the facilities that we are developing with São Martinho and Paraíso Bioenergia and deployment of our technology at other sugar and ethanol mills. There can be no assurance that we will ever achieve or sustain profitability on a quarterly or annual basis.

We have very limited experience producing our products at the commercial scale needed for the development of our business, and we will not succeed if we cannot effectively scale our technology and processes.

To commercialize our products, we must be successful in using our yeast strains to produce target molecules at commercial scale and on an economically viable basis. Such production will require that our technology and processes be scalable from laboratory, pilot and demonstration projects and industrial-scale test runs to commercial-scale production. Up to and through most of 2010, our primary focus was research and development. In 2011, we commenced commercial manufacturing operations at three contract manufacturing facilities: Biomin in Brazil, Antibióticos in Spain and Tate & Lyle in the U.S. We have very limited manufacturing experience and cannot be sure that we will be successful in establishing these or future larger-scale production operations in a timely manner and on a scale that will allow us to meet our plans for commercialization. We are outsourcing to contract manufacturers and other third parties some of the production process development work associated with commercial scale-up and such third parties may not perform such development work at the level we expect. Furthermore, our technology may not perform as expected when applied at commercial scale on a sustained basis, or we may encounter operational challenges for which we are unable to devise a workable solution. For example, in 2011 at our contract manufacturing facilities, contamination in the production process, problems with plant utilities, lack of automation and related human error, process modifications to reduce costs and adjust product specifications, and other similar challenges decreased process efficiency, created delays and increased our costs. Such challenges are likely to continue as we and our contract manufacturing partners develop our production processes and establish new facilities. We may not be able to scale up our production in a timely manner, if at all, even to the extent we successfully complete product development in our laboratories and pilot and demonstration facilities and conduct successful industrial-scale test runs. If this occurs, our ability to commercialize our technology will be adversely

Table of Contents

affected, and, with respect to any 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 our products and achieve profits. Similarly, our ability to produce the volume of Biofene covered by our existing agreements is based in part on our ability to achieve substantially higher production efficiencies than we have to date. We may never achieve those production efficiencies.

We will require additional financing to fund our anticipated operations and may not be able to obtain such financing on favorable terms, if at all.

We will continue 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. We may also from time to time consider acquisitions of other companies, assets or technologies to accelerate our research and development and commercialization efforts. In addition, we plan to make significant capital expenditures in connection with our contract manufacturing arrangements and mill production plant arrangements. While we plan to enter into relationships with sugar and ethanol producers for them to provide some portion or all of the capital needed to build the new, adjacent bolt-on production facility, such parties may not be willing to provide such capital and we may be required to provide some or all of the financing that we currently expect to be provided by these owners. Furthermore, our anticipated working capital needs and our planned operating and capital expenditures for 2012 and 2013 will require significant inflows of cash from credit facilities and similar sources of indebtedness, as well as funding from collaboration partners. Some of these necessary financing sources are not yet subject to definitive agreements or have not committed to funding arrangements. In addition, our anticipated working capital needs and strategic plans in 2012 and beyond will depend on our ability to identify and secure additional sources of funding beyond those we have currently identified. Such sources of funding may include equity or debt offerings, in addition to collaboration revenue and other forms of debt. If we fail to secure such funding, we may be forced to curtail our operations, which could include reductions or delays of planned capital expenditures or scaling back our operations. We have had to adjust the timing for construction projects relating to the São Martinho plant due to financing constraints, and the projected completion date for São Martinho is being assessed and could be subject to further delays and adjustment based on the timing and success of our financing activities. If we are forced to curtail our operations, we may be unable to proceed with construction of certain planned production facilities, enter into definitive agreements for supply of feedstock and associated production arrangements that are currently subject to letters of intent, commercialize our products within the timeline we expect, or otherwise continue our business as currently contemplated.

If, to support our planned operations, we seek additional types of funding that involve the issuance of equity securities, our existing stockholders would suffer dilution. For example, in February 2012, we completed a private placement of our common stock that resulted in the issuance of approximately 10.2 million shares of our common stock and entered into a securities purchase agreement that resulted in the issuance of $25.0 million in unsecured senior convertible promissory notes that are convertible into common stock at an initial conversion price of $7.0682. The convertible notes contain various covenants, including restrictions on the amount of debt we are permitted to incur. We may conduct additional financings if they become available on appropriate terms and we deem them to be consistent with our financing strategy. If we raise additional debt financing, we may be subject to additional restrictive covenants that limit our ability to conduct our business. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. If we fail to raise sufficient funds and continue to incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop and commercialize products or technologies, or otherwise respond to competitive pressures could be significantly limited. If this happens, we may be forced to delay or terminate research and development programs or the commercialization of products resulting from our technologies, curtail or cease operations, or obtain funds through collaborative and licensing arrangements that may require us to relinquish commercial rights, or grant licenses on terms that are not favorable to us. If adequate funds are not available, we will not be able to successfully execute our business plan or continue our business.

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

We have selected Brazil as the optimal geography for a substantial proportion of the initial large-scale commercial production of our products, largely because of the availability of sugarcane as a feedstock and the existing infrastructure for producing, gathering and processing this sugarcane. Our business plan envisions that we

Table of Contents

will develop this production capacity primarily through arrangements with existing sugar and ethanol producers. In order to have control over the development of our first major large-scale commercial production facility in Brazil, we entered into an agreement with São Martinho, one of the largest sugar and ethanol producers in Brazil, for the joint ownership and development of a production facility at the São Martinho mill. We also entered into a manufacturing agreement with Paraíso Bioenergia, also in Brazil, under which we will be responsible for construction of the production facility. A substantial component of our planned production capacity in the near and long term depends on the completion and commencement of operations at these production facilities, and development of additional facilities using similar models thereafter.

Delays in completion of our production facilities at São Martinho and Paraíso Bioenergia will cause delays in commencement of large-scale production and hamper our ability to reduce our production costs. We will have to adjust our goals for production volume in 2012 and beyond based on, among other things, our ability to raise sufficient financing to fund construction and commissioning costs, delays in process development at contract manufacturing facilities and uncertainty relating to the timing of these large-scale facilities. Once the facilities are operational, they must perform as we have designed them. If we encounter significant delays, cost overruns, engineering problems, equipment supply constraints or other serious challenges in bringing these facilities online, we may be unable to produce our initial renewable products in the time frame we have planned, or we may need to continue to use contract manufacturing sources to a greater degree, which would reduce our expected gross margins. Further, if our efforts to complete, and commence production at, these facilities are not successful, other mill owners in Brazil 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 construction of manufacturing facilities at São Martinho and Paraíso Bioenergia requires significant capital expenditures and subjects us to significant liquidity and production risks.

Our initial large-scale production facility construction plan was for the plant at São Martinho and we are designing and managing the project. We expect the construction costs of the new facility to total approximately $100 million**.** Ultimately, under the terms of our joint venture agreements, São Martinho will contribute the lower of R$61.8 million reais (US$32.9 million based on the exchange rate at December 31, 2011) and half of the aggregate cost of construction with us contributing the remainder; however the timing of contributions from São Martinho depend on in part on the successful commencement of commercial operations at the plant, which could leave us vulnerable in the event we encounter challenges in building the facility or bringing it online, delays in achieving commercial viability with our Biofene production process, disputes with São Martinho or other unanticipated events that may occur prior to the time São Martinho makes its capital contribution. In addition, because São Martinho s contribution is capped, we will bear the responsibility for construction costs in excess of those anticipated. Furthermore, under our manufacturing agreement with Paraíso Bioenergia, we are responsible for building fermentation and separation capacity to establish the planned production facility. We anticipate funding construction of such facilities with our working capital and with debt and other financing; however, we cannot be sure that we will be able to raise financing for these projects in sufficient amounts or on acceptable terms in a timely manner, and we have already had to delay certain construction projects associated with the São Martinho plant due to financing constraints. If we fail to raise sufficient funds or are required to conserve working capital for other uses, we may be forced to delay or terminate projects, which could have a material adverse effect on our ability to achieve target production levels in the coming years.

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

The terms of our joint venture with São Martinho are complex and are set forth in a number of agreements and schedules. If we and São Martinho disagree over the interpretation of any of these joint venture documents, the future success of the joint venture may be impaired and any amount that we have invested in it may be at risk.

The joint venture has agreed to purchase, and São Martinho has agreed to provide, feedstock for a price that is based on the average return that São Martinho could receive from the production of its current products, sugar and ethanol. If the cost of these products increases relative to the price at which we can sell the output that we are required to purchase from the joint venture, our return on sales of products produced by the joint venture would be adversely affected. 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 interest rate. We may not be able to sell the output at

Table of Contents

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. Finally, our purchase obligation with the mill requires us to purchase the output 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.

If the joint venture is terminated, we would be required to buy the joint venture s assets at fair value and transfer them to another location. In that event, we could incur significant unexpected costs and be required to find alternative locations for our facility, which would substantially delay the commencement of production. In addition, 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, 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.

We consolidate our joint venture with São Martinho in accordance with the guidance for consolidation of variable interest entities, which requires an ongoing assessment of whether we have the power to direct the activities that most significantly impact the joint venture s economic performance. We may be unable to consolidate this joint venture in the future, if we no longer meet the requirements for consolidation as a variable interest entity.

We plan to enter into arrangements with Brazilian sugar and ethanol producers to produce a substantial portion of our products, and if we are not able to complete these arrangements in a timely manner and on terms favorable to us, our business will be adversely affected.

To expand our production in Brazil beyond that of our initial production facilities with Biomin, Antibióticos, Tate & Lyle, São Martinho and Paraíso Bioenergia, we intend to enter into agreements with sugar and ethanol producers in Brazil that require them to make a substantial capital or operating contribution to produce our renewable products. In return, we expect to provide them with a share of the higher gross margin we believe we will realize from the sale of these products relative to their existing products. There can be no assurance that a sufficient number of Brazilian sugar and ethanol mill owners will accept the opportunity to partner with us for the production of our products, whether on those terms or at all. Reluctance on the part of mill owners may be caused, for example, by their failure to understand our technology or product opportunities or agree with the greater economic benefits that we believe they can achieve from partnering with us. Mill owners may also be reluctant or unable to obtain needed capital, or they may be limited by existing contractual obligations with other third parties, liability, health and safety concerns, additional maintenance, training, operating and other ongoing expenses. We have entered into letters of intent with certain Brazilian sugar and ethanol producers to produce our products and São Martinho has the option for production at a second mill, but these do not bind either the mill owner or us to enter into and proceed with a formal relationship. In addition, there are numerous issues regarding these mill relationships that must be successfully negotiated with each of the mill owners and we may not be successful in completing these negotiations. Even if sugar and ethanol producers are willing to build new facilities and produce our products, they may do so only on economic terms that place more of the cost, or confer less of the economic return, on us than we currently anticipate. If we are not successful in negotiations with sugar and ethanol mill owners, our cost of gaining this production capacity may be higher than we anticipate in terms of up-front costs, capital expenditure or lost future returns, and we may not gain the production base that we need in Brazil to allow us to grow our business.

Building new, bolt-on facilities adjacent to existing sugar and ethanol mills for production of our products requires significant capital, and if mill owners are unwilling to contribute capital, or do not have or have access to this capital, production of our products would be more limited or more expensive than expected and our business would be harmed.

We expect to expand our production capacity over time using a capital light approach, through which mill owners would invest a substantial portion or all of the capital needed to build our bolt-on production facilities, in exchange for a share of the higher gross margin from the sale of our renewable chemicals and fuels, as compared to their current products. Mill owners may perceive this construction as a costly process requiring substantial capital or operating contribution. Mill owners may not have sufficient capital of their own for this purpose or may not be willing or able to secure financing. As a result, they may choose not to contribute the amount of capital that we

Table of Contents

anticipate or may need to seek external sources of financing, which may not be available. If the mill owner needs to obtain financing through debt, we may be required to provide a guarantee. Furthermore, even if we are able to establish mill relationships where mill owners contribute desired levels of capital, we will be required to contribute significant capital ourselves, as is the case with the facilities at Biomin, Antibióticos, Tate & Lyle, São Martinho and Paraíso Bioenergia. As we add relationships and commit to building additional production facilities, we will require additional financial resources to finance such projects, which could include equity financing, debt and additional contributions from existing and new collaboration partners. Even if sugar and ethanol producers are attracted to the opportunity, they may not be able to obtain credit to pursue it, which could adversely affect our ability to develop the production capacity needed to allow us to grow our business.

Our reliance on contract manufacturers for near term production exposes us to risks relating to the costs, contractual terms, location, equipment installation, technology transfer and availability of that contract manufacturing and could adversely affect our growth.

We commenced commercial production of Biofene and some specialty chemical products in 2011 through the use of contract manufacturers, and we anticipate that we will continue to use contract manufacturers for the next several years. Setting up sufficient contract manufacturing facilities requires us to make significant capital expenditures, which reduces our cash and subjects us to losses from depreciation. For example, we have incurred, and expect to continue to incur, significant capital expenditures in connection with our contract manufacturing arrangements, including Biomin in Brazil, Tate & Lyle in the U.S., and Antibióticos in Spain. In addition, many of our contract manufacturing agreements contain terms that commit us to pay for such capital expenditures and other costs incurred by the plant operators and owners, which could result in contractual liability for us even if we determine that we no longer wish to pursue a particular contract manufacturing arrangement. Some of such agreements also contain requirements to pay bonuses for milestone achievements by the contractor, minimum offtake requirements with penalties for failure to purchase specified amounts in a given period, and other terms that create contingent liabilities or other obligations for us. Any failure to comply with such requirements could result in legal claims against us, resulting in additional liability and diverting management attention, which could have a material adverse effect on our business.

Furthermore, 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 are unable to secure the services of such third parties when and as needed, we may lose customer opportunities and the growth of our business may be impaired. Also, in order for production to commence under our contract manufacturing arrangements, we will generally have to provide equipment needed for the production of our products and we cannot be assured that such equipment can be ordered, or installed, on a timely basis, at acceptable costs, or at all. In addition, 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.

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 until we are able to optimize the supply chain. For example, we currently rely on Antibióticos in Spain for a large percentage of our production volume. This reliance means that we must ship Biofene produced in Spain to satisfy demand in various locations around the world. In addition, Antibióticos uses non-sugarcane syrup as its feedstock source, which results in higher production costs than using Brazilian sugarcane syrup used in our Brazilian facilities.

We rely on third parties for process development and such third parties may not be successful in helping us achieve the production efficiency we need.

We have outsourced some of our production process development to contract manufacturers and other third parties and are relying on them to help us achieve production efficiency in our commercial scale-up efforts. Such

Table of Contents

third parties may not perform this work as well as we need them to in order for us to produce our products in a commercially viable manner. For example, third parties may prioritize other projects or customers or lack expertise or resources at any given time. Failures to develop our production process could prevent us from being able to offer our planned products at competitive prices, on the timeline we expect, or at all. In addition, we expect that our production costs using contract manufacturers will be higher, based on scale of operations, feedstock and contract manufacturing economics, than the costs to produce our products in sugar and ethanol mills with which we have entered into long term relationships.

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

Currently, our costs of production are not low enough to allow us to offer many of our planned products at competitive prices. For us to establish significant sales of our specialty chemicals or fuels, we must achieve commercially-viable production efficiencies and cost structures. Our production cost depends on many factors that could have a negative effect on our ability to offer our planned products at competitive prices. For example, the price of feedstock and our ability to build large-scale production capacity will have a significant impact on our pricing. Other factors that impact our production cost 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 cost, 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. Although we have begun to sell squalane and some diesel, we are in the very early stages of selling our products into the commercial markets we are targeting. Our sales and marketing efforts for our initial products are primarily focused on a small number of target customers and we will need to convince them that our products are comparable to or better than products they currently use that we seek to replace, both in terms of cost and performance. In addition, these customers will need to complete product qualification procedures, which may not be achieved in a timely manner or at all. We also face various risks related to commercial production, including obtaining assistance of contract manufacturers, production process development and production efficiency as discussed in the production risk factors above.

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

We anticipate that the production of our products will require large volumes of feedstock. In the near term, we will rely on a mixture of feedstock sources for use at our contract manufacturing operations, including corn-based dextrose, beet molasses and cane sugar. For our large-scale production facilities in Brazil, we expect to rely 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 that vary. Weather conditions have historically caused volatility in the ethanol and sugar industries by causing crop failures or reduced harvests. Excessive rainfall can adversely

Table of Contents

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, 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.

We have entered into a number of agreements for the development, initial commercialization and sale of certain products that contain important technical, development and commercial milestones. If we do not meet those milestones our future revenue and financial results will be harmed.

We have entered into a number of agreements regarding arrangements for the further development of certain of our products and, in some cases, for ultimate sale 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 these agreements contain important conditions that must be satisfied before any such purchases may be made. These conditions include research and development milestones and technical specifications that must be achieved to the satisfaction of our customers, which we cannot be certain we will achieve. Some agreements provide that we will not initiate sales until we achieve advances in production efficiency to lower production costs. In addition, these agreements contain exclusivity and other terms that may limit our ability to commercialize our products and technology in ways that we do not currently envision. If we do not achieve these contractual milestones, our revenues and financial results will be harmed.

Our relationship with our strategic partner Total may have a substantial impact on our company.

We have entered into a strategic relationship with Total. As part of this relationship, Total has made a significant equity investment in our company and has certain board membership rights, as well as certain first negotiation rights in the event of a sale of our company. As a result, Total will have access to a significant amount of information about our company and the ability to influence our management and affairs. Total s right of first negotiation may adversely affect our ability to complete a change in control transaction that our Board of Directors believes is in the best interests of stockholders other than Total.

We also entered into a license, development, research and collaboration agreement with an affiliate of Total, under which we may develop, produce and commercialize products with Total. The agreement provides for Total to pay up to the first $50.0 million in research costs for selected research and development projects, but we must agree with Total on the product development projects we wish to pursue. Although we have agreed on two initial product development programs, we have not yet finalized all relevant terms and conditions for those programs. We cannot be certain that we will agree on any future product development projects. Our ability to successfully pursue product development under this agreement will depend, among other things, on our ability to work cooperatively with Total. If we cannot agree to the final terms and conditions for our initial projects, or agree on any subsequent projects, then we would not receive the research and development funding we expect from Total, and this could adversely affect our product development plans and would lead to an impairment of our deferred charged assets. In addition, Total has a right of first negotiation with us with respect to exclusive commercialization arrangements that we would propose to enter into with certain 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. Further, the agreement is complex and covers a range of future activities, and disputes may arise between us and Total that could delay the programs on which we are working or could prevent the commercialization of products developed under our collaboration agreement. Total also has the right to terminate the collaboration agreement in the event we undergo a sale or change of control to certain entities, which could discourage a potential acquirer from making an offer to acquire us.

In November 2011, we entered into an amendment of the collaboration agreement that provides for an exclusive strategic collaboration for the development of renewable diesel products and contemplates that the parties will establish a joint venture for the production and commercialization of such renewable diesel products on an exclusive, worldwide basis. It also provides that commercialization and production of jet fuel, already under

Table of Contents

development pursuant to the original collaboration agreement, would be conducted on an exclusive, worldwide basis through the same joint venture. Further, the amendment provides the joint venture with the right to produce and commercialize certain other chemical products made through the use of our technology on a non-exclusive basis. In addition to requiring us to work with Total in these key strategic areas of our business, the amendment contains a number of provisions that create contractual risk for us. These include various provisions that allow Total to terminate its efforts with respect to the development project, reduce its funding, not participate in the joint venture, and/or require royalty payments by us. For example, the amendment provides that definitive agreements to form the joint venture must be in place by March 31, 2012 (or another 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, will terminate. The continuation of the renewable diesel program and the formation of the joint venture are also subject to certain mutual intellectual property due diligence conditions. Under the amendment, each party retains certain rights to independently produce and sell renewable diesel under specified circumstances subject to paying royalties to the other party. In addition, Total has an option, upon completion of the renewable diesel program, to notify us that it does not wish to pursue production or commercialization of renewable diesel under the amendment. If Total exercises this right, we are obligated pay Total specified royalties based on our net income. Such royalty payments would also include a share of net proceeds received by us from any sale of our renewable diesel business.

An increase in the price and profitability of ethanol and sugar relative to our products could adversely affect our arrangements with sugar and ethanol producers.

In order to induce owners of sugar and ethanol facilities to produce our products, we generally have planned to compensate them for the feedstock consumed in the production of our products in an amount equal to the revenue they would have realized had they instead produced their traditional products, plus any incremental costs incurred in the production of our products over their usual production costs. Also, as we sell our products, we expect to share a portion of the realized gross margin with these mill owners. An increase in the price of ethanol or sugar relative to the price at which we can sell our products could result in the cost of our products increasing without a corresponding increase in the price at which we can sell our products. In this event our results of operations would be adversely affected. If ethanol prices are sufficiently high that the return from converting a given amount of sugarcane to ethanol exceeds the return from converting that amount of sugarcane into our products, then we will have to compensate the mill owner for that loss or risk the mill owner reverting to the production of ethanol and not producing our products at all. Many factors could cause this unfavorable price dislocation. If sugar prices increase over a sustained period of time, this may encourage sugar production at the expense of ethanol in mills with flexibility to produce both products, which in turn could cause domestic prices in Brazilian reais for ethanol to increase. In addition, the Brazilian government currently requires the use of anhydrous ethanol as a gasoline additive. Any change in these government policies could affect ethanol demand in a way that discourages mill owners from producing our products.

The price of sugarcane feedstock 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. Changes in such prices and terms could result in higher sugarcane prices and/or a significant decrease in the volume of sugarcane available for the production of our products. If Consecana were to cease to be involved in this process, such prices and terms could become more volatile. Any of these events could adversely affect our business and results of operations.

Our initial large-scale commercial production capacity is planned for 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. In the past, the Brazilian economy was characterized by frequent and occasionally extensive intervention by the Brazilian government and unstable economic cycles. The Brazilian government has changed in the past, and may change in the future, monetary, taxation, credit, tariff and other policies to influence the course of Brazil s economy. For example, the government s actions to control inflation have at times involved setting wage and price controls, adjusting interest rates, imposing taxes and exchange controls and limiting imports into Brazil. We have no control over, and cannot predict, what policies or actions the Brazilian government may take

Table of Contents

in the future. For example, the Brazilian government may take actions to support state-controlled entities in our industry that could adversely affect us. 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;
- 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 U.S.;
- tariffs, trade protection measures and other regulatory requirements;
- successful compliance with U.S. 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.

Such factors could have a material adverse impact on our results of operations and financial condition.

We cannot predict whether the current or future Brazilian government will implement changes to existing policies on taxation, exchange controls, monetary strategy and social security, among others. We cannot estimate the impact of any such changes on the Brazilian economy or our operations.

We may face risks relating to the use of our genetically modified yeast strains and if we are not able to secure regulatory approval for the use of our yeast strains or if we face public objection to our use of them, our business could be adversely affected.

The use of genetically-modified microorganisms, or 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 U.S., the Environmental Protection Agency, or EPA, regulates the commercial use of GMMs as well as potential products from the GMMs. 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.

Table of Contents

In Brazil, GMMs are regulated by the National Biosafety Technical Commission, or 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 Biomin, our first 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 U.S. and Brazil, we have entered into a contract manufacturing agreement with Antibióticos in Spain and expect to identify other locations for production around the world. 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 the scope and nature of these regulations will likely be different from country to country. If we cannot meet the applicable requirements in other countries in which we intend to produce products using our yeast strains, or if it takes longer than anticipated to obtain such approvals, our business could be adversely affected.

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

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

Our diesel fuel is subject to regulation by various government agencies, including the EPA and the California Air Resources Board in the U.S. and Agência Nacional do Petróleo, or ANP, in Brazil. To date, we have obtained registration with the EPA for the use of our diesel in the U.S. at a 35% blend rate with petroleum diesel. We are currently working to secure ANP approval for use of our diesel in Brazil at a 10% blend rate. We are also currently in the process of registration of our fuel with the California Air Resources Board and the European Commission. Registration with each of these bodies is required for the sale and use of our fuels within their respective jurisdictions. In addition, for us to achieve full access to the U.S. fuels market for our fuel products, we will need to obtain EPA and California Air Resources Board (and potentially other state agencies) certifications for our feedstock pathway and production facilities, including certification of a feedstock lifecycle analysis relating to greenhouse gas emissions. Any delay in obtaining these additional certifications could impair our ability to sell our renewable fuels to refiners, importers, blenders and other parties that produce transportation fuels as they comply with Federal and state requirements to include certified renewable fuels in their products.

We expect to encounter regulations in most if not all of the countries in which we may seek to sell our renewable chemical and fuel products, and we cannot assure you that we 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 may not be able to commercialize our products and our business will be adversely affected.

Table of Contents

We cannot assure you that our products will be approved or accepted by customers in specialty chemical markets.

The markets we intend to enter first are primarily those for specialty chemical products used by large consumer products or specialty chemical companies. In entering these markets, 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, 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 that our products are comparable to the chemicals that they currently use or that the use of our products is otherwise to their benefits, we will not be successful in entering these markets and our business will be adversely affected.

If we are unable to satisfy the significant product qualification requirements of equipment manufacturers, we may not be able to successfully enter markets for transportation fuels, and our business would be adversely affected.

In order for our diesel fuel product to be accepted in various countries around the world, diesel engine manufacturers must determine that the use of our fuels in their equipment will not invalidate product warranties and that they otherwise regard our diesel as an acceptable fuel. In addition, we must successfully demonstrate to these manufacturers that our fuel does do not degrade the performance or reduce the life cycle of their engines or cause them to fail to meet emissions standards. Meeting these suitability 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 products have 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. Although our diesel fuel satisfies existing pipeline operator and fuel distributor requirements, such fuel has not been reviewed nor transported by such operators as of this date. If these operators impose volume limitations on the transport of our fuels, our ability to sell our fuels may be impaired.

Our ability to sell a jet fuel product will be subject to the same types of qualification requirements as our diesel fuel, although we believe the qualification process will take longer and will be more expensive than the process for diesel.

We expect our international operations to 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 some costs and expenses in Brazilian reais 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 U.S. dollar and other foreign currencies. There can be no assurance that the real will not significantly appreciate or depreciate against the U.S. dollar in the future.

We 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 U.S. dollar compared to those foreign currencies will increase our costs as expressed in U.S. 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 changes to the fixed the value of the real, may weaken the U.S. 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.

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

Table of Contents

cannot compete effectively against these companies or products we may not be successful in bringing our products to market or further growing our business after we do so.

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

In the specialty chemical markets that we are initially seeking to enter, and in other chemical markets that we may seek to enter in the future, we will compete primarily with the established providers of chemicals currently used in these products. Producers of these incumbent products include global oil companies, large international chemical companies and other 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. These refiners compete with us by selling traditional fuel products and some are also pursuing hydrocarbon fuel production using non-renewable feedstocks, such as natural gas and coal, as well as processes using renewable feedstocks, such as vegetable oil and biomass. We also expect to compete with companies that are developing the capacity to produce diesel and other transportation fuels from renewable resources in other ways. These include advanced biofuels companies using specific enzymes that they have developed to convert cellulosic biomass, which is non-food plant material such as wood chips, corn stalks and sugarcane bagasse, into fermentable sugars. Similar to us, some companies are seeking to use engineered enzymes to convert sugars, in some cases from cellulosic biomass and in others from natural sugar sources, into renewable diesel and other fuels. Biodiesel companies convert vegetable oils and animal oils into diesel fuel and some are seeking to produce diesel and other transportation fuels using thermochemical methods to convert biomass into renewable fuels.

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

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

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

The oil companies, large chemical companies and well-established agricultural products companies with whom we compete are much larger than we are, 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 must provide our products on a cost-competitive basis with these traditional products and other available alternatives. Some of our competitors may use their influence to impede the development and acceptance of renewable products of the type that we are seeking to produce.

We believe that for our chemical products to succeed in the market, we must demonstrate that our products are comparable alternatives to existing products and to any alternative products that are being developed for the same markets based on some combination of product cost,

availability, performance, and consumer preference characteristics. With respect to our diesel and other transportation fuels products, we believe that our product must perform as effectively as petroleum-based fuel, or alternative fuels, and be available on a cost-competitive basis. In

Table of Contents

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.

Amyris Fuels currently competes with regional distributors in its purchase, distribution and sale of third party ethanol and reformulated ethanol-blended gasoline in the southeastern U.S. and competes with other suppliers based on price, convenience and reliability of supply.

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

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

Our pursuit of new product opportunities may not be technically feasible, which would limit our ability to expand our product line and sources of revenues.

Our technology provides us with the capability to genetically engineer microbes to produce potentially thousands of types of molecules. In order to grow our business over time we will need to, and we intend to, commit substantial resources, alone or with collaboration partners, to the development and analysis of these new molecules and the new pathways, or microbial strains, required to produce them. There is no guarantee that we will be successful in creating microbial strains that are capable of producing each target molecule or that the molecule can be produced with the required purity profile for a given market in a cost effective manner. For example, some target molecules may be toxic to the microbe, which means that the production of the molecule kills the microbe. Other molecules may be biologically producible in small amounts but cannot be produced in quantities adequate for commercial production. Alternatively, the compounds are produced in adequate quantities but, because they are volatile, we are unable to capture the compounds in commercially adequate quantities or at a commercially viable cost. In addition, some of our microbes may have longer production cycles that may make production of the target molecules more costly. If we are unable to resolve issues of this nature, we may not be able to expand our product line to introduce new sources of future revenues.

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. For example, in 2007, the U.S. Congress passed an alternative fuels mandate that called for more than 15 billion gallons of liquid transportation fuels sold in 2012 to come from alternative sources, including renewable fuels, a mandate that grows to 36 billion gallons by 2022. Of this amount, a minimum of 21 billion gallons must be advanced biofuels, mostly cellulosic, by 2022. In the U.S. and in a number of other countries, these regulations and policies 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. In addition, in December 2011, the U.S. Congress did not renew legislation that extended tax credits to blenders of certain renewable fuel products and is not likely to renew them retroactively. The absence of tax credits, subsidies and other incentives in the U.S. and foreign markets for renewable fuels, or any inability of our customers to access such credits, subsidies and incentives, may adversely affect demand for our products and increase the overall cost of commercialization of our renewable fuels, which would adversely affect our renewable fuels business. In addition, in December 2011, a U.S. federal court found the State of California s Low Carbon Fuel Standard unconstitutional, which could have a negative impact on demand for advanced renewable fuels. The resulting 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.

Table of Contents

Concerns associated with renewable fuels, including land usage, national security interests and food crop usage, continue to receive legislative, industry and public attention. This 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 or the business of our partners or customers, 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 sugarcane, restrict our ability to use sugarcane to produce our products, and negatively impact our future revenues and results of operations.

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 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 U.S. and overseas. Although we have implemented safety procedures for handling and disposing of these materials and waste products in an effort to comply with these laws and regulations, we cannot be sure that our safety measures are compliant or capable of eliminating the risk of 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 and without regard to comparative fault. 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.

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 to achieve, 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;
- disruptions in the production process at any facility where we produce our products;
- 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 anticipated cost;

fluctuations in foreign currency exchange rates;

gains or losses associated with our hedging activities, especially in Amyris Fuels;

Table of Contents

fluctuations in the price of and demand for sugar, ethanol, and petroleum-based and other products for which our products are alternatives;

seasonal production and sale of our products;

the effects of competitive pricing pressures, including decreases in average selling prices of our products;

unanticipated expenses associated with changes in governmental regulations and environmental, health and safety requirements;

reductions or changes to existing fuel and chemical regulations and policies;

departure of executives or other key management employees;

our ability to use our net operating loss carry forwards to offset future taxable income;

business interruptions such as earthquakes and other natural disasters;

our ability to integrate businesses that we may acquire;

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.

Due to these factors and 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.

Disruption of transportation and logistics services or insufficient investment in public infrastructure could adversely affect our business.

We intend to conduct initial large-scale manufacturing of most of our renewable products in Brazil, where existing transportation infrastructure is underdeveloped. Substantial investments required for infrastructure changes and expansions may not be made on a timely basis or at all. Any delay or failure in making the changes to or expansion of infrastructure could harm demand or prices for our renewable products and impose additional costs that would hinder their commercialization.

In Brazil, a substantial portion of commercial transportation is by truck, which is significantly more expensive than the rail transportation available to U.S. and certain other international producers. Our dependence on truck transport may affect our production cost and, consequently, impair our ability to compete with petroleum-sourced products in local and world markets.

We may not continue to operate a fuels marketing and distribution business, which could have a material adverse effect on our revenues.

Amyris Fuels currently purchases ethanol produced by third parties and gasoline and sells both pure ethanol and ethanol-blended gasoline to wholesale customers. To date, these sales have accounted for nearly all of our revenue, with substantially all of the remainder coming from grants and collaborations. If we establish our joint venture with Total, we believe we may no longer need the capabilities represented by Amyris Fuels. We may not be able to replace the revenues lost if we transition out of the Amyris Fuels business, particularly in 2012 and 2013 while we continue our efforts to establish our renewable products business.

Our fuels marketing and distribution business depends on purchasing and reselling ethanol produced by third parties and reformulated ethanol-blended gasoline, which may not be available to us on favorable terms or at all and which subjects us to distribution and environmental risks.

Amyris Fuels currently purchases and sells ethanol and reformulated ethanol-blended gasoline under short-term agreements and in spot transactions. In the near term, we plan to continue the purchase and sale of ethanol and reformulated ethanol-blended gasoline and to hedge the price volatility of ethanol and gasoline using futures contracts. We cannot predict future market prices or other terms of any supply contracts that Amyris Fuels may enter into. We cannot assure you that Amyris Fuels will be able to purchase ethanol and reformulated ethanol-blended gasoline at favorable prices, allowing our ethanol and reformulated ethanol-blended gasoline marketing activities to

Table of Contents

be profitable. In addition, there can be no guarantee that futures contracts to hedge the risks from the purchase and sale of ethanol and gasoline will effectively mitigate risk as intended, that such hedging instruments will always be available, or that counterparties to such hedging contracts will honor their obligations. As a result of these pricing and hedging uncertainties, Amyris Fuels may incur operating losses, harming our results of operations and financial condition. In addition, in order to distribute and sell ethanol and reformulated ethanol-blended gasoline, Amyris Fuels needs access to certain terminal and other storage capacity for ethanol and reformulated ethanol-blended gasoline, and relies on providers of transportation and transloading services for the movement of ethanol and reformulated ethanol-blended gasoline. If Amyris Fuels is unable to access sufficient terminal and other storage capacity and/or to obtain transportation and transloading services on favorable terms, its business will be substantially harmed, which will reduce our future revenues and adversely affect our results of operations and financial condition. Furthermore, there are potential environmental hazards, including risk of spill or fire, associated with the movement and storage of fuel. Although Amyris maintains insurance coverage to mitigate its exposure to such risks, its liability coverage may not be sufficient for a catastrophic event.

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

We have experienced, and may 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 493 at December 31, 2011. We are working simultaneously on multiple projects to develop, produce and commercialize several types of renewable chemicals and fuels. 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.

In addition, if we grow our organization too rapidly, we may be forced to scale back our headcount and other aspects of our operating structure to maintain alignment with changing strategies. For example, as part of our operating plan for 2012, we intend to reduce our cost structure by improving efficiency in our operations and reducing non-critical expenditures. We expect these efforts to include reductions to our workforce and adjustments to the timing and scope of planned capital expenditures in the coming quarters.

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 harmed.

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 U.S. and other countries. As of February 15, 2012, we had 66 issued U.S. and foreign patents and 279 pending U.S. and foreign patent applications that are 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

Table of Contents

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 U.S. and the landscape is expected to become even more uncertain in view of recent rule changes by the Patent and Trademark Office, or USPTO, the introduction of patent reform legislation in Congress and recent decisions in patent law cases by the U.S. Supreme Court. In addition, we obtained certain key U.S. patents using a procedure for accelerated examination recently implemented by the USPTO which requires special activities and disclosures that may create additional risks related to the validity or enforceability of the U.S. patents so obtained. The patent situation outside of the U.S. is even less predictable. As a result, the validity and enforceability of patents cannot be predicted with certainty. Moreover, we cannot be certain whether:

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

We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Even if patents are issued, they may not be sufficient to protect our technology or product candidates. The patents we own or license and those that may be issued in the future may be challenged, invalidated, rendered unenforceable, or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages. In particular, U.S. patents we obtained using the USPTO accelerated examination program may introduce additional risks to the validity or enforceability of some or all of these specially-obtained U.S. patents if validity or enforceability are challenged. Moreover, third parties could practice our inventions in territories where we do not have patent protection or in territories where they could obtain a compulsory license to our technology where patented. Such third parties may then try to import products made using our inventions into the U.S. or other territories. Additional uncertainty may result from potential passage of patent reform legislation by the U.S. Congress, legal precedent by the U.S. Federal Circuit and Supreme Court as they determine legal issues concerning the scope and construction of patent claims and inconsistent interpretation of patent laws by the lower courts. Accordingly, we cannot ensure that any of our pending patent applications will result in issued patents, or even if issued, predict the breadth, validity and enforceability of the claims upheld in our and other companies patents.

Unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in the U.S. 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 Brazilian 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

Table of Contents

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 U.S. 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 U.S. which requires us to take a different approach to protecting our trade secrets in Brazil. Some of these approaches to trade secret protection may be novel and untested under Brazilian law and we cannot guarantee that we would prevail if our trade secrets are contested in Brazil. If any of the above risks materializes our failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Third parties may misappropriate our yeast strains.

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

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

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

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

- infringement and other intellectual property claims, which could be costly and time consuming to litigate, whether or not the claims have merit, and which could delay getting our products to market and divert management attention from our business;

- substantial damages for past infringement, which we may have to pay if a court determines that our product candidates or technologies infringe a competitor s patent or other proprietary rights;

Table of Contents

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, we may have 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 U.S. 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 U.S., 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. 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 U.S. 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.

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. 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 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, in recent quarters our stock price has declined significantly, which reduces

Table of Contents

our ability to recruit and retain employees using equity compensation. If we are not able to attract and retain 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. 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 mean that either the employee or we may terminate their employment at any time.

As we build our business, we will need to hire additional qualified research and development and management personnel to succeed. The process of hiring, training and successfully integrating qualified personnel into our operation, in both the U.S. and Brazil, is a lengthy and expensive one. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products, particularly in Brazil. Our failure to hire and retain qualified personnel could impair our ability to meet our research and development and business objectives and adversely affect our results of operations and financial condition.

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. We may be named directly in product liability suits relating to our products, even for defects resulting from errors of our commercial partners, contract manufacturers or chemical finishers. These claims could be brought by various parties, including customers who are purchasing products directly from us or other users who purchase products from our customers. We could also be named as co-parties in product liability suits that are brought against the contract manufacturers or Brazilian sugar and ethanol mills who 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 assure you that our contract manufacturers or the sugar and ethanol producers who produce our products will have adequate insurance coverage to cover against potential claims. This insurance may not provide adequate coverage against potential losses, and if claims or losses exceed our liability insurance coverage, we may go out of business. In addition, insurance coverage may become more expensive, which would harm our results of operations.

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

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

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

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting beginning with the Annual Report on Form 10-K for the year ending December 31, 2011. The process of implementing our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention of management. We cannot be certain that these measures will ensure that we maintain adequate controls over our financial processes and reporting in the future. In addition, to the extent we create joint ventures or have any variable interest entities and the financial statements of such entities are not prepared by us, we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in us adding monitoring and audit processes and increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future. This may be particularly true where we are establishing such entities with commercial partners that do not have sophisticated

Table of Contents

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, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business.

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

We apply the applicable accounting principles set forth in the U.S. 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 IPR&D acquired in a business combination. We utilized 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, 2011, we recorded a net carrying value of approximately $9.1 million in in-process research and development and goodwill associated with our acquisition of Draths Corporation.

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

In general, under Section 382 of the Internal Revenue Code, or Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change net operating loss carry forwards, 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 reflected on our balance sheet, even if we attain profitability.

Loss of our government grant funding could impair our research and development efforts.

In 2010, we were awarded a $24.3 million Integrated Bio-Refinery grant from the U.S. Department of Energy, or DOE. The terms of this grant make the funds available to us to leverage and expand our existing Emeryville, California, pilot plant and support laboratories to develop U.S.-based production capabilities for renewable fuels and chemicals derived from sweet sorghum. Generally, government grant agreements have fixed terms and may be terminated, modified or recovered by the granting agency under certain conditions. For example, our grant requires us to implement substantial reporting, governance and other processes to comply with the grant

Table of Contents

contract, and we are subject to audits and reviews by government agencies with respect to such compliance. We have limited experience in complying with such government contract requirements, and any compliance failures can result in additional audits, burdensome corrective action plans, and significant penalties, up to and including termination, modification and recovery of the grant by the granting agency. Our first DOE audit was performed in 2011 for the year ended December 31, 2010, and as a result of the audit we were required to implement a corrective action plan with respect to certain administrative requirements. If the DOE terminates its grant agreement with us, our U.S.-based research and development activities could be impaired, which could harm our business.

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

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

Risks Related to Ownership of Our Common Stock

Our stock price may be volatile.

The market price of our common stock has been, and we expect it to continue to be, subject to significant fluctuations. As of March 5, 2012, the reported closing price for our common stock on the NASDAQ Global Select Market was $4.59. 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 registration statement, or other factors, some of which are beyond our control, such as:

- fluctuations in our financial results or outlook or those of companies perceived to be similar to us;
- changes in estimates of our financial results or recommendations by securities analysts;
- changes in market valuations of similar companies;
- changes in the prices of commodities associated with our business such as sugar, ethanol and petroleum;
- changes in our capital structure, such as future issuances of securities or the incurrence of debt;
- announcements by us or our competitors of significant contracts, acquisitions or strategic alliances;
- regulatory developments in the U.S., 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, the 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.

Table of Contents

In the past, many companies that have experienced volatility in the market price of their stock have become subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management s attention from other business concerns, which could seriously harm our business.

We are incurring increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could harm our results of operations.

As a public company, we are incurring significant additional accounting, legal and other expenses, including costs associated with public company reporting requirements. We also have incurred and will continue to incur costs associated with corporate governance requirements, including requirements under Section 404 and other provisions of the Sarbanes-Oxley Act, as well as rules implemented by the SEC and NASDAQ. The expenses incurred by public companies for reporting and corporate governance purposes have increased dramatically in recent years. We expect these rules and regulations to substantially increase our financial and legal compliance costs.

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

As of December 31, 2011, our executive officers, directors, current ten percent or greater stockholders and entities affiliated with them together beneficially owned approximately 68% and a single stockholder-Total-held approximately 21.0% of our outstanding common stock, respectively. In addition, certain of our existing stockholders, including stockholders who held 5% or more of our common stock as of December 31, 2011, purchased additional shares in an offering completed in February 2012, resulting in an increase in the concentration of capital stock ownership by insiders. 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 may 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 amended and restated certificate of incorporation and our amended and restated bylaws that became effective upon the completion of our initial public offering 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:

Table of Contents

staggered board of directors;

authorizing the board to issue, without stockholder approval, preferred stock with rights senior to those of our common stock;

authorizing the board 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;

not authorizing our stockholders to call a special stockholder meeting;

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 15 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 10 business days, during which we are obligated to continue to negotiate with Total and will be prohibited from entering into an agreement with any other potential acquirer.

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

Table of Contents

FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the other documents we have filed with the SEC that are incorporated herein by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties, including those discussed under the heading Risk Factors above, include, but are not limited to, the possibilities of delays or failures in development, production or commercialization of products, and in our reliance on third parties to achieve our goals.

All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including, but not limited to, statements concerning our strategy, future production capacity and other aspects of our future operations, ability to improve our production efficiencies, future financial position, future revenues, projected costs, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words anticipates, believes, estimates, expects, intends, may, plans, projects, will, would and similar expressions are intended to identify f statements, although not all forward-looking statements contain these identifying words.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. You should read this prospectus, any supplements to this prospectus and the documents that we reference in this prospectus with the understanding that our actual future results may be materially different from what we expect.

The forward-looking statements in this prospectus and in any prospectus supplement or other document we have filed with the SEC represent our views as of the date thereof. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future or to conform these statements to actual results or revised expectations, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

USE OF PROCEEDS

The proceeds from the sale of the Shares offered pursuant to this prospectus are solely for the accounts of the selling stockholders. Accordingly, we will not receive any of the proceeds from the sale of the Shares offered by this prospectus. See Selling Stockholders and Plan of Distribution described below.

Table of Contents

SELLING STOCKHOLDERS

The 4,173,622 shares of common stock covered by this prospectus may be acquired by the selling stockholders from us by electing to convert the senior unsecured convertible promissory notes issued to the selling stockholders pursuant to the Securities Purchase Agreement, dated February 24, 2012, by and between us and the selling stockholders. We agreed to file a registration statement with the SEC covering the resale of the shares issuable upon conversion of the unsecured senior convertible promissory notes referenced above.

The following table provides information regarding the selling stockholders and the number of Shares each selling stockholder is offering under this prospectus. We have prepared this table based on information furnished to us by or on behalf of the selling stockholders. Under the rules of the SEC, beneficial ownership includes shares over which the indicated beneficial owner exercises voting or investment power. Beneficial ownership is determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and generally includes voting or investment power with respect to securities, including any securities that grant the selling stockholder the right to acquire common stock within 60 days of March 5, 2012. Unless otherwise indicated in the footnotes below, we believe that the selling stockholders have sole voting and investment power with respect to all shares beneficially owned. The percentage ownership data is based on 56,292,803 shares of our common stock issued and outstanding as of March 5, 2012. Since the date on which they provided us with the information below, the selling stockholders may have sold, transferred or otherwise disposed of some or all of their Shares in transactions exempt from the registration requirements of the Securities Act of 1933, as amended, or the Securities Act.

The Shares may be sold by the selling stockholders, by those persons or entities to whom they transfer, donate, devise, pledge or distribute their Shares or by other successors in interest. The information regarding shares beneficially owned after this offering assumes the sale of all Shares offered by each of the selling stockholders. The selling stockholders may sell less than all of the Shares listed in the table. In addition, the Shares listed below may be sold pursuant to this prospectus or in privately negotiated transactions. Accordingly, we cannot estimate the number of Shares the selling stockholders will sell under this prospectus.

The selling stockholders have not held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years, other than beneficial ownership of the shares described in the table below.

Name of Selling Stockholder (1)	Shares Beneficially Owned before Offering (2)		Shares Offered Hereby (3)	Shares Beneficially Owned After Offering (3)	
	Number	Percentage (%)		Number	Percentage (%)
Fidelity Advisor Series I: Fidelity Advisor Equity Income Fund	73,003	0.13%	73,003		0.00%
Variable Insurance Products Fund: Equity-Income Portfolio	195,665	0.35%	195,665		0.00%
Fidelity Devonshire Trust: Fidelity Equity-Income Fund	297,246	0.53%	297,246		0.00%
Fidelity Destiny Portfolios: Fidelity Advisor Diversified Stock Fund	607,957	1.08%	282,957	325,000	0.58%
Variable Insurance Products Fund III: Growth and Income Portfolio	112,192	0.20%	112,192		0.00%
Fidelity Advisor Series I: Fidelity Advisor Growth and Income Fund	225,234	0.40%	225,234		0.00%

Table of Contents

Name of Selling Stockholder (1)	Shares Beneficially Owned before Offering (2)		Shares Offered Hereby (3)	Shares Beneficially Owned After Offering (3)	
	Number	Percentage (%)		Number	Percentage (%)
Fidelity Securities Fund: Fidelity Growth & Income Portfolio	794,403	1.41%	794,403		0.00%
Fidelity Commonwealth Trust: Fidelity Large Cap Stock Fund	342,619	0.61%	55,884	286,735	0.51%
Fidelity Advisor Series I: Fidelity Advisor Large Cap Fund	524,278	0.93%	85,594	438,684	0.78%
Variable Insurance Products Fund III: Balanced Portfolio	279,841	0.50%	164,398	115,443	0.21%
Fidelity Advisor Series I: Fidelity Advisor Dividend Growth Fund	188,766	0.34%	111,909	76,857	0.14%
Fidelity Securities Fund: Fidelity Dividend Growth Fund	1,757,417	3.12%	1,040,717	716,700	1.27%
Fidelity Rutland Square Trust II: Strategic Advisers Core Multi-Manager Fund	1,227	0.00%	707	520	0.00%
Fidelity Rutland Square Trust II: Strategic Advisers Core Fund	163,454	0.29%	97,054	66,400	0.12%

(1) Fidelity Management & Research Company (***Fidelity***), 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 8,773,148 Shares of the Company as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940, including the selling stockholders. Edward C. Johnson 3d and FMR LLC, through its control of Fidelity, and the funds each has sole power to dispose of the 8,773,148 Shares owned by the Funds. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d, Chairman of FMR LLC, has the sole power to vote or direct the voting of the shares owned directly by the Fidelity Funds, which power resides with the Funds Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the Funds Boards of Trustees.

(2) The number of Shares beneficially owned by each selling stockholder is based on the conversion price applicable to the unsecured senior convertible promissory notes held by the selling stockholders as of March 5, 2012. The 4,173,622 shares of common stock referred to in this prospectus takes into account potential anti-dilution adjustments that may increase the number of Shares beneficially owned by the selling stockholders.

(3) We do not know when or in what amounts a selling stockholder may offer Shares for sale. The selling stockholders may not sell any or all of the Shares offered by this prospectus. Because the selling stockholders may offer all or some of the Shares pursuant to this offering and because there are currently no agreements, arrangements or undertakings with respect to the sale of any of the Shares, we cannot estimate the number of Shares that will be held by the selling stockholders after completion of this offering. However, for purposes of this table, we have assumed that, after completion of this offering, none of the Shares covered by this prospectus will be held by the selling stockholders.

Table of Contents

PLAN OF DISTRIBUTION

The selling stockholders, or their pledgees, donees, transferees, or any of their successors in interest selling Shares received from a named selling stockholders as a gift, partnership distribution or other non-sale-related transfer after the date of this prospectus (all of whom may be selling stockholders), may sell the Shares from time to time on any stock exchange or automated interdealer quotation system on which the Shares are listed, in the over-the-counter market, in privately negotiated transactions or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at prices otherwise negotiated. The selling stockholders may sell the Shares by one or more of the following methods, without limitation:

(a) block trades in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

(b) purchases by a broker or dealer as principal and resale by the broker or dealer for its own account pursuant to this prospectus;

(c) an exchange distribution in accordance with the rules of any stock exchange on which the securities are listed;

(d) ordinary brokerage transactions and transactions in which the broker solicits purchases;

(e) privately negotiated transactions;

(f) short sales;

(g) through the writing of options on the securities, whether or not the options are listed on an options exchange;

(h) through the distribution of the securities by any selling stockholder holder to its partners, members or stockholders;

(i) one or more underwritten offerings on a firm commitment or best efforts basis; and

(j) any combination of any of these methods of sale.

The selling stockholders may also transfer the securities by gift. We do not know of any arrangements by the selling stockholders for the sale of any of the securities.

The selling stockholders may engage brokers and dealers, and any brokers or dealers may arrange for other brokers or dealers to participate in effecting sales of the Shares. These brokers, dealers or underwriters may act as principals, or as an agent of a selling stockholder. Broker-dealers may agree with a selling stockholder to sell a specified number of the Shares at a stipulated price per Share. If the broker-dealer is unable to sell the Shares acting as agent for a selling stockholder, it may purchase as principal any unsold Shares at the stipulated price. Broker-dealers who acquire the Shares as principals may thereafter resell the Shares from time to time in transactions in any stock exchange or automated interdealer quotation system on which the Shares are then listed, at prices and on terms then prevailing at the time of sale, at prices related to the then-current market price or in negotiated transactions. Broker-dealers may use block transactions and sales to and through broker-dealers, including transactions of the nature described above. The selling stockholders may also sell the Shares in accordance with Rule 144 under the Securities Act of 1933, as amended, rather than pursuant to this prospectus, regardless of whether the Shares are covered by this prospectus.

From time to time, one or more of the selling stockholders may pledge, hypothecate or grant a security interest in some or all of the Shares owned by them. The pledgees, secured parties or persons to whom the Shares have been hypothecated will, upon foreclosure in the event of default, be deemed to be selling stockholders. The number of a selling stockholder s Shares offered under this prospectus will decrease as and when it takes such actions. The plan of distribution for that selling stockholder s Shares will otherwise remain unchanged. In addition,

Table of Contents

a selling stockholder may, from time to time, sell the Shares short, and, in those instances, this prospectus may be delivered in connection with the short sales and the Shares offered under this prospectus may be used to cover short sales.

To the extent required under the Securities Act of 1933, as amended, the aggregate amount of selling stockholders Shares being offered and the terms of the offering, the names of any agents, brokers, dealers or underwriters and any applicable commission with respect to a particular offer will be set forth in an accompanying prospectus supplement. Any underwriters, dealers, brokers or agents participating in the distribution of the Shares may receive compensation in the form of underwriting discounts, concessions, commissions or fees from a selling stockholder and/or purchasers of selling stockholders Shares, for whom they may act (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The selling stockholders and any underwriters, brokers, dealers or agents that participate in the distribution of the Shares may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, and any discounts, concessions, commissions or fees received by them and any profit on the resale of the Shares sold by them may be deemed to be underwriting discounts and commissions.

A selling stockholder may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the Shares in the course of hedging the positions they assume with that selling stockholder, including, without limitation, in connection with distributions of the Shares by those broker-dealers. A selling stockholder may enter into option or other transactions with broker-dealers that involve the delivery of the Shares offered hereby to the broker-dealers, who may then resell or otherwise transfer those Shares. A selling stockholder may also loan or pledge the Shares offered hereby to a broker-dealer and the broker-dealer may sell the Shares offered hereby so loaned or upon a default may sell or otherwise transfer the pledged Shares offered hereby.

The selling stockholders and other persons participating in the sale or distribution of the Shares will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including Regulation M. This regulation may limit the timing of purchases and sales of any of the Shares by the selling stockholders and any other person. The anti-manipulation rules under the Securities Exchange Act of 1934, as amended, may apply to sales of securities in the market and to the activities of the selling stockholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the Shares to engage in market-making activities with respect to the particular Shares being distributed for a period of up to five business days before the distribution. These restrictions may affect the marketability of the Shares and the ability of any person or entity to engage in market-making activities with respect to the Shares.

We have agreed to indemnify in certain circumstances the selling stockholders and any brokers, dealers and agents who may be deemed to be underwriters, if any, of the Shares covered by the registration statement, against certain liabilities, including liabilities under the Securities Act of 1933, as amended. The selling stockholders have agreed to indemnify us in certain circumstances against certain liabilities, including liabilities under the Securities Act of 1933, as amended.

The Shares offered hereby are issuable to the selling stockholders pursuant to an exemption from the registration requirements of the Securities Act of 1933, as amended. We agreed to register the Shares under the Securities Act of 1933, as amended, and to keep the registration statement of which this prospectus is a part effective until the earlier of the date on which the selling stockholders have publicly sold all of the Shares or the date that all the Shares may be sold by non-affiliates without volume or manner-of-sale restrictions pursuant to Rule 144 promulgated under the Securities Act of 1933, as amended, without the requirement for the Company to be in compliance with the current public information requirement under Rule 144 as determined by counsel to the Company pursuant to a written opinion letter to such effect, addressed and reasonably acceptable to the Company s transfer agent. We have agreed to pay all expenses in connection with this offering, including the fees and expenses of one counsel to the selling stockholders, but not including underwriting discounts, concessions, commissions or fees of the selling stockholders or any fees and expenses of other counsel or other advisors to the selling stockholders.

We will not receive any proceeds from sales of any Shares by the selling stockholders.

We cannot assure you that the selling stockholders will sell all or any portion of the Shares offered hereby.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

Common Stock

As of March 9, 2012, our authorized capital stock included 100,000,000 shares of common stock, par value $0.0001 per share. A description of the material terms and provisions of our restated certificate of incorporation and restated bylaws affecting the rights of holders of our common stock is set forth below. The description is intended as a summary, and is qualified in its entirety by reference to the form of our restated certificate of incorporation and the form of our restated bylaws to that are filed as exhibits to the registration statement relating to this prospectus.

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available if our Board of Directors, in its discretion, determines to issue dividends, and only then at the times and in the amounts that our Board of Directors may determine.

Voting Rights

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Our restated certificate of incorporation eliminates the right of stockholders to cumulate votes for the election of directors and establishes a classified Board of Directors, divided into three classes with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing in office for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Wells Fargo Bank, National Association.

Stock Exchange Listing

Our common stock is listed on the NASDAQ Global Select Market under the symbol AMRS.

Preferred Stock

Our Board of Directors has the authority to issue, without further action by the stockholders but subject to compliance with all requirements of applicable law, up to 5,000,000 shares of preferred stock in one or more series and to fix the designations, powers, preferences and other rights of the shares of each such series and any qualifications, limitations or restrictions in respect thereof. These designations, powers, preferences and other rights could include dividend rights, conversion rights, voting rights, terms of redemptions, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and

Table of Contents

payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in our control or other corporate action.

Options

As of December 31, 2011, options to purchase 3,600,489 shares of our common stock granted from the 2010 Equity Plan remained outstanding and 2,674,008 shares of the Company s common stock remained available for issuance under awards that may be granted from the 2010 Equity Plan. The options outstanding as of December 31, 2011 had a weighted-average exercise price of approximately $24.01 per share.

As of December 31, 2011, options to purchase 4,716,527 shares of the Company s common stock granted from the 2005 Stock Option/Stock Issuance Plan remained outstanding and zero shares of the Company s common stock remained available for issuance under the 2005 Plan as a result of the adoption of the 2010 Equity Incentive Plan discussed above. The options outstanding under the 2005 Plan as of December 31, 2011 had a weighted-average exercise price of approximately $6.57 per share.

Warrants

As of December 31, 2011, the Company had the following outstanding unexercised common stock warrants:

Underlying Stock	Exercise Price per Share	Shares as of December 31, 2011
Common Stock	$ 24.88	2,884
Common Stock	$ 25.26	2,252
Common Stock	$ 10.67	21,087
Total		26,223

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.

Registration Rights

Certain of our stockholders hold registration rights pursuant to (i) the Amended and Restated Investors Rights Agreement, dated June 21, 2010, by and between us and certain of our stockholders, as amended by the First Amendment to Amended and Restated Investors Rights Agreement, dated February 23, 2012, by and between us and certain of our stockholders (as amended, the ***IRA***), and (ii) the Registration Rights Agreement, dated February 27, 2012, by and between us and certain of our stockholders (the ***Registration Rights Agreement***).

Pursuant to the Registration Rights Agreement, we are obligated to file a registration statement on Form S-3 with the SEC registering the resale of all of the shares of our common stock issuable upon conversion of the senior unsecured convertible promissory notes issued to the selling stockholders pursuant to the Note Agreement by no later than March 19, 2012. This prospectus is a part of the registration statement we have filed in order to satisfy our obligations under the Registration Rights Agreement.

The IRA provides for various registration rights, all as described below:

Demand Registration Rights

Until June 21, 2013, the holders of at least 30% of the shares having registration rights under the IRA may request that we file a registration statement under the Securities Act of 1933, as amended, covering the shares of the

35

Table of Contents

requesting holders. We will be obligated to use our commercially reasonable efforts to register such shares if they represent at least 20% of the shares resulting from conversion of our preferred stock and if the anticipated aggregate price to the public is at least $5,000,000. We are required to effect no more than two registration statements upon exercise of these demand registration rights. We may postpone the filing of a registration statement for up to 90 days once in a 12-month period if we determine that the filing would be seriously detrimental to us and our stockholders.

Piggyback Registration Rights

If we register any of our securities for public sale, the stockholders with registration rights will have the right to include their shares in the registration statement. However, this right does not apply to a registration relating to any of our employee benefit plans, the offer and sale of debt securities, or a registration on any registration form that does not include the information required for registration of the shares having piggyback registration rights. The managing underwriter of any underwritten offering will have the right to limit, due to marketing reasons, the number of shares registered by these holders to 25% of the total shares covered by the registration statement.

Form S-3 Registration Rights

The holders of shares having registration rights can request that we register all or a portion of their shares on Form S-3 if we are eligible to file a registration statement on Form S-3 and the aggregate price to the public of the shares offered is at least $2,000,000. We are required to file no more than one registration statement on Form S-3 upon exercise of these rights in any 12-month period. We may postpone the filing of a registration statement on Form S-3 for up to 90 days once in a 12-month period if we determine that the filing would be seriously detrimental to us and our stockholders.

Registration Expenses

We will pay all expenses incurred in connection with exercise of demand and piggyback registration rights, except for underwriting discounts and commissions. However, we will not pay for any expenses of any demand registration if the request is subsequently withdrawn by the holders of a majority of the shares requested to be included in such a registration statement, subject to limited exceptions. The expenses associated with exercise of Form S-3 registration rights will be borne pro rata by the holders of the shares registered on such Form S-3.

Expiration of Registration Rights

The registration rights described above will expire after February 23, 2017.

Anti-Takeover Provisions

The provisions of Delaware law, our restated certificate of incorporation and our restated bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

Section 203 of the Delaware General Corporation Law prevents some Delaware corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation s assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation s outstanding voting stock, unless:

- the transaction is approved by the Board of Directors prior to the time that the interested stockholder became an interested stockholder;

- upon consummation of the transaction which resulted in the stockholder s becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or

Table of Contents

at or subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the Board of Directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

If Section 203 applied to us, the restrictions could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, could discourage attempts to acquire us.

A Delaware corporation may opt out of the restrictions on business combinations contained in Section 203 with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders amendment approved by at least a majority of the outstanding voting shares. 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.

Restated Certificate of Incorporation and Restated Bylaw Provisions

Our restated certificate of incorporation and our restated bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our management team, including the following:

Board of Directors Vacancies. Our restated certificate of incorporation and restated bylaws authorize only our Board of Directors to fill vacant directorships. In addition, the number of directors constituting our Board of Directors will be set only by resolution adopted by a majority vote of our entire Board of Directors. These provisions prevent a stockholder from increasing the size of our Board of Directors and gaining control of our Board of Directors by filling the resulting vacancies with its own nominees.

Classified Board. Our restated certificate of incorporation and restated bylaws provide that our Board of Directors is classified into three classes of directors. The existence of a classified board could delay a successful tender offeror from obtaining majority control of our Board of Directors, and the prospect of that delay might deter a potential offeror. Pursuant to Delaware law, the directors of a corporation having a classified board may be removed by the stockholders only for cause. In addition, stockholders will not be permitted to cumulate their votes for the election of directors.

Stockholder Action; Special Meeting of Stockholders. Our restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. Our restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our Board of Directors, the chairman of our Board of Directors, our chief executive officer or our president.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder s notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.

Issuance of Undesignated Preferred Stock. Under our restated certificate of incorporation, our Board of Directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the Board of Directors. The existence of authorized but unissued shares of preferred stock enables our Board of Directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Table of Contents

In addition, we have an agreement with Total that, so long as Total holds at least 10% of our voting securities, we are required to notify Total if our Board of Directors seeks to cause the sale of the company or if we receive an offer to acquire us. In the event of such decision or offer, we are required to provide Total with all information given to an offering party and provide Total with an exclusive negotiating period of 15 business days in the event the Board of Directors authorizes us to solicit offers to buy our company, or five business days in the event that we receive an unsolicited offer to purchase us. These rights of Total may have the effect of delaying, deferring or discouraging another person from acquiring our company.

Table of Contents

LEGAL MATTERS

The validity of the issuance of the Shares offered hereby will be passed upon for us by Fenwick & West LLP, Mountain View, California. The validity of the Shares will be passed upon for any underwriters or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements and management s assessment of the effectiveness of internal control over financial reporting (which is included in Management s Report on Internal Control over Financial Reporting) of Amyris, Inc. incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2011 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the filing requirements of the Securities Exchange Act of 1934, as amended. 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 SEC at 1-800-SEC-0330. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 available free of charge through a link on the Investors section of our website located at www.amyris.com (under Financial Information SEC Filings) as soon as reasonably practicable after they are filed with or furnished to the SEC. Information on our website is not incorporated by reference in this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the securities being offered pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in Where You Can Find More Information. We hereby incorporate by reference the following documents:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2011, filed with the SEC on February 28, 2012;

Our Current Reports on Form 8-K filed with the SEC on January 3, February 22 and February 28, 2012; and

The description of the our common stock set forth under the caption Description of Capital Stock in our Registration Statement on Form S-1 (File No. 333-166135) as originally filed with the Securities and Exchange Commission on April 16, 2010, including any amendment or report filed for the purpose of updating such description.

Table of Contents

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date our offering is terminated or completed, including all filings made after the date of the initial registration statement and prior to the effectiveness of the registration statement, are deemed to be incorporated by reference into, and to be a part of, this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Amyris, Inc.,

5885 Hollis Street, Suite 100

Emeryville, California

Attention: Investor Relations

+1 (510) 740-7481

Copies of these filings are also available free of charge through a link on the Investors section of our website located at www.amyris.com (under SEC Filings) as soon as reasonably practicable after they are filed with the SEC. The information contained on our website is not a part of this prospectus.

Table of Contents

PROSPECTUS

4,173,622 shares

AMYRIS, INC.

Common Stock

, 2012

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any shares in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.

Table of Contents

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses to be paid by the registrant, other than estimated underwriting discounts and commissions, if any, in connection with this offering. All amounts shown are estimates except for the SEC registration fee:

SEC registration fee	$ 2,263.00
Printing and engraving	*
Legal fees and expenses	*
Accounting fees and expenses	$ 17,500.00
Transfer agent and registrar fees	*
Miscellaneous	*
Total	$ *

* Estimated expenses not presently known

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation s Board of Directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended.

As permitted by the Delaware General Corporation Law, the registrant s restated certificate of incorporation contains provisions that eliminate the personal liability of its directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following:

- any breach of the director s duty of loyalty to the registrant or its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law (regarding unlawful dividends and stock purchases); or
- any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the registrant s restated bylaws provide that:

- the registrant is required to indemnify its directors and executive officers to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions;

the registrant may indemnify its other employees and agents as set forth in the Delaware General Corporation Law;

the registrant is required to advance expenses, as incurred, to its directors and executive officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions; and

the rights conferred in the bylaws are not exclusive.

In addition, the registrant has entered into indemnity agreements with each of its current directors and executive officers to provide them with additional contractual assurances regarding the scope of the indemnification set forth in the registrant s restated certificate of incorporation and restated bylaws and to provide additional procedural protections. The indemnification provisions in the registrant s restated certificate of incorporation and restated bylaws and the indemnification agreements entered into between the registrant and each of its directors and executive officers may be sufficiently broad to permit indemnification of the registrant s directors and executive officers for liabilities arising under the Securities Act of 1933, as amended.

The registrant currently carries liability insurance for its directors and officers.

Table of Contents

Two of the registrant s directors (Messrs. Doerr and Kaul) are also indemnified by their employers with regard to their service on the registrant s Board of Directors.

Reference is made to the following documents filed as exhibits to this registration statement regarding relevant indemnification provisions described above and elsewhere herein:

Exhibit Number	Description
3.01	Restated Certificate of Incorporation
3.02	Restated Bylaws
4.04	Registration Rights Agreement
4.05	Amended and Restated Investors Rights Agreement
4.06	First Amendment to Amended and Restated Investors Rights Agreement

ITEM 16. EXHIBITS

Please see the Exhibit Index beginning on page II-6 of this registration statement.

ITEM 17. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That:

(i) For purposes of determining any liability under the Securities Act of 1933, as amended, any information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant under Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it is declared effective.

Table of Contents

(ii) For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered, and the offering of these securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) That, for the purpose of determining liability under the Securities Act of 1933, as amended, to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in this registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or a prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of this registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the registrant s annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Emeryville, State of California, on March 9, 2012.

AMYRIS, INC.

/s/ JOHN G. MELO
John G. Melo
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints John G. Melo, Jeryl L. Hilleman and Tamara L. Tompkins, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent 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 for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons 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 9, 2012
/s/ JERYL HILLEMAN **Jeryl Hilleman**	Chief Financial Officer (Principal Accounting and Financial Officer)	March 9, 2012
/s/ RALPH ALEXANDER **Ralph Alexander**	Director	March 9, 2012
/s/ PHILIPPE BOISSEAU **Philippe Boisseau**	Director	March 9, 2012
/s/ JOHN DOERR **John Doerr**	Director	March 9, 2012
/s/ SAMIR KAUL **Samir Kaul**	Director	March 9, 2012

/s/ Arthur Levinson	Director	March 9, 2012
Arthur Levinson, Ph.D.		
/s/ Patrick Pichette	Director	March 9, 2012
Patrick Pichette		

Table of Contents

Signature	Title	Date
/s/ Carole Piwnica **Carole Piwnica**	Director	March 9, 2012
/s/ Fernando Reinach **Fernando Reinach, Ph.D.**	Director	March 9, 2012
/s/ Neil Renninger **Neil Renninger, Ph.D.**	Director	March 9, 2012

Table of Contents

EXHIBIT INDEX

Exhibit		Previously Filed				Filed
Number	**Description**	**Form**	**File No.**	**Filing Date**	**Exhibit**	**Herewith**
1.01	Underwriting Agreement					*
3.01	Restated Certificate of Incorporation	10-Q	001-34885	November 10, 2010	3.01	
3.02	Restated Bylaws	10-Q	001-34885	November 10, 2010	3.02	
4.01	Specimen of Common Stock Certificate	S-1	333-166135	July 6, 2010	4.01	
4.02	Securities Purchase Agreement dated February 24, 2012 among the registrant and registrant s security holders listed therein					X
4.03	Form of Unsecured Senior Convertible Promissory Note issued to each selling stockholder in the amounts set forth next to each selling stockholder s name on Schedule I of Exhibit 4.02 hereof					X
4.04	Registration Rights Agreement dated February 27, 2012 between the registrant and registrant s security holders listed therein					X
4.05	Amended and Restated Investors Rights Agreement dated June 21, 2010 among registrant and registrant s security holders listed therein	S-1	333-166135	June 23, 2010	4.02	
4.06	First Amendment to Amended and Restated Investors Rights Agreement dated February 23, 2012 among registrant and registrant s security holders listed therein					X
4.07	Side Letter dated June 21, 2010 between registrant and Total Gas & Power USA, SAS	S-1	333-166135	June 23, 2010	4.19	
5.01	Opinion of Fenwick & West LLP regarding the Securities					X
23.01	Consent of Fenwick & West LLP (included in Exhibit 5.01)					X
23.02	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm					X
24.01	Power of attorney (included on the signature page)					X

* To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with the offering of securities.