AMYRIS, INC. Form 10-Q November 09, 2012

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington D.C. 20549

FORM 10-Q

(Mark One)

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended September 30, 2012

OR

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

For the Transition Period from to Commission File Number: 001-34885

#### AMYRIS, INC.

(Exact name of registrant as specified in its charter)Delaware55-0856151(State or other jurisdiction of<br/>incorporation or organization)(I.R.S. Employer<br/>Identification No.)Amyris, Inc.5885 Hollis Street, Suite 100Emeryville, CA 94608<br/>(510) 450-0761<br/>(Address and telephone number of principal executive offices)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

Large accelerated filer	х	Accelerated filer	
Non-accelerated filer		Smaller reporting company	

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class Common Stock, \$0.0001 par value per share Outstanding at October 26, 2012 59,430,122 shares

AMYRIS, INC. QUARTERLY REPORT ON FORM 10-Q For the Quarterly Period Ended September 30, 2012 INDEX

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# PART I - FINANCIAL INFORMATION

# **ITEM 1. FINANCIAL STATEMENTS**

Amyris, Inc.

Condensed Consolidated Balance Sheets

(In Thousands, Except Share and Per Share Amounts)

(Unaudited)

	September 30, 2012	December 31, 201	11
Assets			
Current assets:			
Cash and cash equivalents	\$44,373	\$95,703	
Short-term investments	56	7,889	
Accounts receivable, net of allowance of \$481 and \$245, respectively	3,807	6,936	
Inventories, net	8,311	9,070	
Prepaid expenses and other current assets	9,995	19,873	
Total current assets	66,542	139,471	
Property and equipment, net	164,703	128,101	
Restricted cash	954		
Other assets	20,133	43,001	
Goodwill and intangible assets	9,248	9,538	
Total assets	\$261,580	\$320,111	
Liabilities and Equity	. ,	. ,	
Current liabilities:			
Accounts payable	\$18,374	\$26,379	
Deferred revenue	1,532	3,139	
Accrued and other current liabilities	24,061	30,982	
Capital lease obligation, current portion	1,871	3,717	
Debt, current portion	2,121	28,049	
Total current liabilities	47,959	92,266	
Capital lease obligation, net of current portion	1,495	2,619	
Long-term debt, net of current portion	103,289	13,275	
Deferred rent, net of current portion	8,886	9,957	
Deferred revenue, net of current portion	4,396	4,097	
Other liabilities	18,893	37,085	
Total liabilities	184,918	159,299	
Commitments and contingencies (Note 5)	- )	,	
Stockholders' equity:			
Preferred stock - \$0.0001 par value, 5,000,000 shares authorized, none			
issued and outstanding			
Common stock - \$0.0001 par value, 100,000,000 shares authorized as of			
September 30, 2012 and December 31, 2011; 59,430,122 and 45,933,138		-	
shares issued and outstanding as of September 30, 2012 and December 31,	6	5	
2011, respectively			
Additional paid-in capital	632,773	548,159	
Accumulated other comprehensive loss	(12,479)	(= 0.0.1	)
Accumulated deficit	· · · /	(381,188	)
Total Amyris, Inc. stockholders' equity	77,465	161,052	,
<b>, , , , , , , , , ,</b>	,	- ,	

Noncontrolling interest	(803	) (240
Total stockholders' equity	76,662	160,812
Total liabilities and stockholders' equity	\$261,580	\$320,111
See the accompanying notes to the unaudited condensed consolidated finan	icial statements.	

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Amyris, Inc. Condensed Consolidated Statements of Operations (In Thousands, Except Share and Per Share Amounts) (Unaudited)

	Three Months 30,	s E	Ended Septeml	ser	Nine Months 30,	Eı	nded Septemb	er
	2012		2011		2012		2011	
Revenues								
Product sales	\$4,728		\$31,162		\$46,615		\$92,998	
Grants and collaborations revenue	14,380		5,114		21,225		12,454	
Total revenues	19,108		36,276		67,840		105,452	
Costs and operating expenses								
Cost of products sold	4,444		35,729		71,891		99,247	
Loss on purchase commitments and write off of production assets	1,438				38,090			
Research and development	15,736		23,441		55,580		66,622	
Sales, general and administrative	17,355		21,174		61,301		59,401	
Total costs and operating expenses	38,973		80,344		226,862		225,270	
Loss from operations	(19,865	)	(44,068	)	(159,022	)	(119,818	)
Other income (expense):								
Interest income	297		609		1,406		1,250	
Interest expense	(1,224	)	(291	)	(3,538	)	(1,172	)
Other income (expense), net	664		310		(512	)	160	
Total other income (expense)	(263	)	628		(2,644	)	238	
Loss before income taxes	(20,128	)	(43,440	)	(161,666	)	(119,580	)
Provision for income taxes	(260	)	(474	)	(753	)	(299	)
Net loss	\$(20,388	)	\$(43,914	)	\$(162,419	)	\$(119,879	)
Net loss attributable to noncontrolling interest	95		224		772		437	
Net loss attributable to Amyris, Inc. common stockholders	\$(20,293	)	\$(43,690	)	\$(161,647	)	\$(119,442	)
Net loss per share attributable to common stockholders, basic and diluted	\$(0.34	)	\$(0.97	)	\$(2.91	)	\$(2.68	)
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic and diluted	58,964,226		45,031,613		55,552,949		44,507,686	

See the accompanying notes to the unaudited condensed consolidated financial statements.

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

	Three Mon September		Nine Mont September	
	2012	2011	2012	2011
Comprehensive loss:				
Net loss	\$(20,388	) \$(43,914	) \$(162,419	) \$(119,879 )
Change in unrealized loss on investments				(5)
Foreign currency translation adjustment, net of tax	(410	) (10,642	) (6,346	) (8,318 )
Total comprehensive loss	(20,798	) (54,556	) (168,765	) (128,202 )
Loss attributable to noncontrolling interest	95	224	772	437
Foreign currency translation adjustment attributable to noncontrolling interest	(41	) —	(209	) —
Comprehensive loss attributable to Amyris, Inc.	\$(20,744	) \$(54,332	) \$(168,202	) \$(127,765 )

See the accompanying notes to the unaudited condensed consolidated financial statements.

Amyris, Inc. Condensed Consolidated Statements of Stockholders' Equity (Unaudited)

	Common St	ock			Accumulated			
(In Thousands, Except Share and Per Share Amounts)	Shares	Amou	Additional Paid-in Capital	Accumulated Deficit	Other Comprehensi Income (Loss)	Noncontrol ve Interest	l <b>ifig</b> tal Equity	
December 31, 2011	45,933,138	\$5	\$548,159	\$(381,188)	. ,	\$(240)	\$160,812	
Issuance of common stock related to employee stock purchase plan and exercise of stock options	1,306,430		1,313	_	_	_	1,313	
Issuance of common stock in a private placement, net of issuance cost of \$334 Restricted stock units	11,896,425	1	62,489	—	_	—	62,490	
settlement, net of tax withholdings	299,584	—	(588)	_	—	—	(588	)
Repurchase of common stock	(53)			_	_	_	_	
Recovery of shares from Draths escrow	(5,402)		_	—	_	—	_	
Stock-based compensation	—	—	21,400		—	—	21,400	
Foreign currency translation adjustment, net of tax	_	—	_	—	(6,555 )	209	(6,346	)
Net loss	_			(161,647)		(772)	(162,419	)
September 30, 2012	59,430,122	\$6	\$632,773	\$(542,835)		\$(803)	\$76,662	
See the accompanying notes to	the unaudited	conder	nsed consoli	dated financial	statements.			

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

		Ended September	
	30,	2011	
Or anoting a activities	2012	2011	
Operating activities Net loss	¢(162 410	) ¢(110.970	``
	\$(162,419	) \$(119,879	)
Adjustments to reconcile net loss to net cash used in operating activities:	10 (0)	7 729	
Depreciation and amortization	10,686	7,728	
Loss on disposal of property and equipment	208		
Stock-based compensation	21,400	18,836	
Amortization of premium on investments		630	
Amortization of debt discount	316	—	
Provision for doubtful accounts	236		
Loss on purchase commitments and write off of production assets	38,090		
Change in fair value of derivative instruments	364		
Other noncash expenses	108	(79	)
Changes in assets and liabilities:			
Accounts receivable	2,864	234	
Inventories, net	612	(4,623	)
Prepaid expenses and other assets	10,655	(1,134	)
Accounts payable	(11,200	) 10,993	
Accrued and other liabilities	(29,362	) 17,700	
Deferred revenue	(1,308	) 4,587	
Deferred rent	(943	) (761	)
Net cash used in operating activities	(119,693	) (65,768	)
Investing activities			
Purchase of short-term investments	(8,240	) (55,286	)
Maturities of short-term investments		105,000	,
Sales of short-term investments	16,449	44,826	
Change in restricted cash	(954	) —	
Acquisition of cash in noncontrolling interest		344	
Purchase of property and equipment, net of disposals	(50,344	) (54,416	)
Deposits on property and equipment	(562	) (16,832	ý
Net cash provided by (used in) investing activities	(43,651	) 23,636	,
Financing activities	(10,001	) 20,000	
Proceeds from issuance of common stock, net of repurchases	696	4,987	
Proceeds from issuance of common stock in private placements, net of issuance		1,507	
cost	62,490	—	
Principal payments on capital leases	(2,970	) (2,109	)
Proceeds from debt issued	105,624	7,622	
Principal payments on debt	(52,052	) (3,962	)
Initial public offering costs		(497	)
Net cash provided by financing activities	113,788	6,041	
Effect of exchange rate changes on cash and cash equivalents	(1,774	) (827	)
Net decrease in cash and cash equivalents	(51,330	) (36,918	)
1	× ·	· · · ·	/

Cash and cash equivalents at beginning of period	95,703	143,060
Cash and cash equivalents at end of period	\$44,373	\$106,142

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

	Nine Months 30,	Ended Septembe	er
	2012	2011	
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$2,831	\$1,131	
Supplemental disclosures of noncash investing and financing activities:			
Acquisitions of assets under accounts payable and accrued liabilities	\$5,672	\$7,166	
Capitalization of manufacturing equipment under ASC840	\$—	\$7,272	
Change in unrealized gain (loss) on foreign currency	\$(5,887	) \$(7,265	)
Issuance of common stock upon exercise of warrants	\$—	\$3,554	
Unpaid investment in joint venture	\$—	\$108	
Long term deposits used for purchase of property and equipment	\$12,286	\$—	
Conversion of other liability to notes payable	\$(23,300	) \$—	
Transfer of fixed assets to current assets	\$—	\$886	
Acquisition of net assets in noncontrolling interest	\$—	\$25	

See the accompanying notes to the unaudited condensed consolidated financial statements.

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# Amyris, Inc. Notes to Unaudited Condensed Consolidated Financial Statements

# 1. The Company

Amyris, Inc. (the "Company") was incorporated in California on July 17, 2003 and reincorporated in Delaware on June 10, 2010 for the purpose of leveraging breakthroughs in synthetic biology to develop and provide renewable compounds for a variety of markets. The Company is currently building and applying its industrial synthetic biology platform to provide alternatives to select petroleum-sourced products used in specialty chemical and transportation fuel markets worldwide. The Company's first commercialization efforts have been focused on a renewable hydrocarbon molecule called farnesene (Biofene®), which forms the basis for a wide range of products varying from specialty chemical applications to transportation fuels, such as diesel. While the Company's platform is able to use a wide variety of feedstocks, the Company focused initially on Brazilian sugarcane. The Company has secured access to this and other feedstock to expand its production capacity working with existing sugar and ethanol mill owners to build new, adjacent bolt-on facilities at their existing mills. In addition, the Company has entered into various contract manufacturing agreements to support commercial production. The Company has established two principal operating subsidiaries, Amyris Brasil Ltda. (formerly Amyris Brasil S.A., "Amyris Brasil") for production in Brazil, and Amyris Fuels, LLC ("Amyris Fuels"). Through the third quarter of 2012, the Company conducted an ethanol and reformulated ethanol-blended gasoline business through Amyris Fuels, but has, as of September 30, 2012 transitioned out of that business.

On September 30, 2010, the Company closed its initial public offering ("IPO") of 5,300,000 shares of common stock. Upon the closing of the IPO, the Company's outstanding shares of convertible preferred stock were automatically converted into 31,550,277 shares of common stock, the outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase a total of 195,604 shares of common stock, and shares of Amyris Brasil held by third party investors were automatically converted into 861,155 shares of the Company's common stock.

The Company has incurred significant losses since its inception. As of September 30, 2012, the Company had an accumulated deficit of \$542.8 million and management believes that it will continue to incur losses and net cash outflows for the foreseeable future.

The Company's strategy is to focus on direct commercialization of higher-value, lower-volume markets while moving lower-margin, higher-volume commodity products into joint venture arrangements with established industry partners. To commercialize its products, the Company must be successful in using its technology to manufacture its products at commercial scale and on an economically viable basis. The Company is building its experience producing renewable products at commercial scale. The Company's prospects are subject to risks, expenses and uncertainties frequently encountered by companies in this stage of development. These risks include, but are not limited to, the Company's ability to finance its operations, its ability to achieve substantially higher production efficiencies than it has to date, timely completion of the construction and the commencement of operations at its production facilities, and its ability to secure additional collaborations and establish joint ventures on acceptable terms.

The Company expects to fund its operations for the foreseeable future with cash and investments currently on hand, with cash inflows from collaboration and grant funding, cash contributions from product sales, and with new debt and equity financing . In February 2012, the Company completed a private placement of 10.2 million shares of common stock for total proceeds of \$58.7 million and raised \$25.0 million through convertible promissory notes. In May 2012, the Company completed a sale of a convertible promissory note for cash proceeds of \$4.1 million. In July 2012, the Company completed a sale of a convertible promissory note for cash proceeds of \$15.0 million and in September 2012, the Company completed a sale of an additional convertible promissory note for additional cash proceeds of \$15.0 million. These notes issued in the third quarter of 2012 used the same conversion

price and included the same covenants that were used in the notes issued in February 2012.

The Company's anticipated working capital needs and its planned operating and capital expenditures for the remainder of 2012 and for 2013 will require significant inflows of cash from collaboration partners, as well as funding from equity or debt offerings, credit facilities or loans, or combinations of these sources. Specifically, the Company will need to raise cash in the fourth quarter in order to fund its operations beyond the fourth quarter of 2012. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities could result in ownership dilution to existing stockholders and the Company may be subject to restrictive covenants that limit the Company's ability to conduct its business.

Beginning in March 2012, the Company initiated a plan to shift a portion of its production capacity from contract manufacturing facilities to a Company-owned plant that is currently under construction. As a result, the Company evaluated its contract manufacturing agreements and recorded a loss of \$31.2 million related to the write-off of \$10.0 million in facility

modification costs and recognition of \$21.2 million of fixed purchase commitments in the three months ended March 31, 2012. The Company recognized an additional charge of \$1.4 million associated with loss on fixed purchase commitments in the three months ended September 30, 2012. The Company computed the loss on facility modification costs and fixed purchase commitments using the same lower of cost or market approach that is used to value inventory. The computation of the loss on firm purchase commitments is subject to several estimates, including the cost to complete and the ultimate selling price of any Company products manufactured at the relevant production facilities, and is therefore inherently uncertain. The Company also recorded losses on write off of production assets of \$5.5 million related to Amyris-owned equipment at contract manufacturing facilities in the three months ended March 31, 2012.

Nearly all of the Company's revenues to date have come from the sale of ethanol and reformulated ethanol-blended gasoline with substantially all of the remaining revenues coming from collaborations and government grants. Effective in the third quarter of 2012, the Company transitioned out of the ethanol and reformulated ethanol-blended gasoline business, which will result in the loss of all future revenue from that business. The Company does not expect to be able to replace much of the revenue lost in the near term as a result of this transition, particularly in 2012 and 2013 while it continues its efforts to establish a renewable products business.

Meeting the Company's anticipated working capital needs and funding its strategic plans for the remainder of 2012 and for 2013 will depend on its ability to identify and secure substantial additional sources of funding beyond those that it has currently identified. Furthermore, some of its anticipated financing sources are subject to risk that it may not meet milestones, or are not yet subject to definitive agreements or funding commitments. Failure to secure such funding in a timely manner, either in the short or long term, the Company may be forced to curtail its operations, which could include reductions or delays of its planned capital expenditures or scaling back its operations. If it is forced to curtail its operations, it may be unable to proceed with construction of certain planned production facilities, including its planned large-scale production plants at Usina São Martinho and Paraíso Bioenergia, enter into definitive agreements for supply of feedstock and associated production arrangements that are currently subject to letters of intent, commercialize its products within the timeline it expects, or otherwise continue its business as currently contemplated.

2. Summary of Significant Accounting Policies

# Basis of Presentation

The accompanying interim condensed consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America ("GAAP") and with the instructions for Form 10-Q and Regulations S-X statements. Accordingly, they do not include all of the information and notes required for complete financial statements. These interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Form 10-K filed with the Securities and Exchange Commission ("SEC") on February 28, 2012. The unaudited condensed consolidated financial statements include the accounts of the Company and its consolidated subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

# Principles of Consolidations

The Company has interests in joint venture entities that are variable interest entities ("VIEs"). Determining whether to consolidate a variable interest entity may require judgment in assessing (i) whether an entity is a VIE and (ii) if the Company is the entity's primary beneficiary and thus required to consolidate the entity. To determine if the Company is the primary beneficiary of a VIE, the Company evaluates whether it has (i) the power to direct the activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to

receive benefits of the VIE that could potentially be significant to the VIE. The Company's evaluation includes identification of significant activities and an assessment of its ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding and financing and other applicable agreements and circumstances. The Company's assessment of whether it is the primary beneficiary of its VIEs requires significant assumptions and judgment.

The unaudited condensed consolidated financial statements of the Company include the accounts of Amyris, Inc., its subsidiaries and two consolidated VIEs with respect to which the Company is considered the primary beneficiary, after elimination of intercompany accounts and transactions. Disclosure regarding the Company's participation in the VIEs is included in Note 8.

# Use of Estimates

In preparing the unaudited condensed consolidated financial statements, management must make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the

unaudited condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

# Unaudited Interim Financial Information

The accompanying interim condensed consolidated financial statements and related disclosures are unaudited, have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the results of operations for the periods presented. The condensed consolidated results of operations for any interim period are not necessarily indicative of the results to be expected for the full year or for any other future year or interim period.

#### Concentration of Credit Risk

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

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

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

Customers	September 30, 2012		December 31, 2011	
Customer A	*		20	%
Customer B	38	%	**	
Customer C	13	%	**	
Customer D	11	%	**	
Customer E	**		10	%
Customer F	26	%	**	

\* No outstanding balance

\*\* Less than 10%

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

	Three Months E 30,	Ended September	Nine Months En September 30,	ded
Customers	2012	2011	2012	2011
Customer A	*	17 %	14 %	**
Customer C	14 9	ő **	**	**
Customer G	**	**	**	17 %
Customer H	51 9	6 *	14 %	, **
Customer I	*	12 %	**	**

\* Not a current customer

\*\* Less than 10%

Fair Value of Financial Instruments

The Company measures certain financial assets and liabilities at fair value based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Where available, fair value is based on or derived from observable market

prices or other observable inputs. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

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

The Company estimates the fair value of its embedded derivative related to Total convertible notes using a Black-Scholes valuation model that combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of the Company's common stock into which the notes are convertible. The Company will continue to mark the bifurcated compound derivative to market due to the conversion price not being indexed to the Company's own stock because of the feature requiring the Company to redeem foregone interest upon conversion by the holder. The change in the fair value of the bifurcated compound derivative is primarily related to the change in price of the underlying common stock and is reflected in the Company's consolidated statements of operations as "other income (expense)".

# Cash and Cash Equivalents

All highly liquid investments purchased with an original maturity date of 90 days or less at the date of purchase are considered to be cash equivalents. Cash and cash equivalents consist of money market funds, certificates of deposit, commercial paper, U.S. Government agency securities and various deposit accounts.

# Accounts Receivable

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

# Investments

Investments with original maturities greater than 90 days that mature less than one year from the consolidated balance sheet date are classified as short-term investments. The Company classifies investments as short-term or long-term based upon whether such assets are reasonably expected to be realized in cash or sold or consumed during the normal cycle of business. The Company invests its excess cash balances primarily in certificates of deposit, short-term investment grade commercial paper and corporate bonds, and U.S. Government agency securities and notes. Certificates of deposits that have maturities greater than 90 days that mature less than one year from the consolidated balance sheet date are classified as short term investments. The Company classifies all of its investments as available-for-sale and records such assets at estimated fair value in the consolidated balance sheets, with unrealized gains and losses, if any, reported as a component of accumulated other comprehensive income (loss) in stockholders' equity. Debt securities are adjusted for amortization of premiums and accretion of discounts and such amortization and accretion are reported as a component of interest income. Realized gains and losses and declines in value that are considered to be other than temporary are recognized in the statements of operations. The cost of securities sold is determined on the specific identification method. There were no significant realized gains or losses from sales of debt securities during the nine months ended September 30, 2012 and 2011. As of September 30, 2012 and December 31,

2011, the Company did not have any other-than-temporary declines in the fair value of its debt securities.

# Restricted Cash

Cash accounts that are restricted to withdrawal or usage are presented as restricted cash. As of September 30, 2012 and December 31, 2011, the Company had \$954,000 and zero, respectively, of restricted cash held by a bank in a certificate of deposit as collateral under a facility lease.

# Inventories

Inventories, which consist of farnesene-derived products, as well as ethanol and reformulated ethanol-blended gasoline, are stated at the lower of cost or market and categorized as finished goods, work-in-process or raw material inventories. In the quarter ended September 30, 2012 the Company sold its remaining inventory of ethanol and reformulated ethanol-blended gasoline as it

transitioned out of this business. The Company evaluates the recoverability of its inventories based on assumptions about expected demand and net realizable value. If the Company determines that the cost of inventories exceeds its estimated net realizable value, the Company records a write-down equal to the difference between the cost of inventories and the estimated net realizable value. If actual net realizable values are less favorable than those projected by management, additional inventory write-downs may be required that could negatively impact the Company's operating results. If actual net realizable values are more favorable, the Company may have favorable operating results when products that have been previously written down are sold in the normal course of business. The Company also evaluates the terms of its agreements with its suppliers and establishes accruals for estimated losses on adverse purchase commitments as necessary, applying the same lower of cost or market approach that is used to value inventory. Cost is computed on a first-in, first-out basis. Inventory costs include transportation costs incurred in bringing the inventory to its existing location.

# **Derivative Instruments**

The Company makes limited use of derivative instruments, which includes currency interest rate swap agreements to manage the Company's exposure to foreign currency exchange rate fluctuations and interest rate fluctuations related to the Company's Banco Pine S.A. loan (discussed below under Note 6). Through the third quarter of 2012, the Company held futures positions on the New York Mercantile Exchange and the CME/Chicago Board of Trade to mitigate the risks related to the price volatility of ethanol and reformulated ethanol-blended gasoline but as of September 30, 2012 the Company has transitioned out of that business and no longer held such derivative instruments. The Company does not engage in speculative derivative activities, and the purpose of its activity in derivative commodity instruments is to manage the financial risk posed by physical transactions and inventory. Changes in the fair value of the derivative contracts are recognized currently in the condensed consolidated statements of operations.

# Asset Retirement Obligations

The fair value of an asset retirement obligation is recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. In addition, asset retirement cost is added to the carrying amount of the associated asset and this additional carrying amount is amortized over the life of the asset. The Company's asset retirement obligations are associated with its commitment to return property subject to an operating lease in Brazil to its original condition upon lease termination.

As of September 30, 2012 and December 31, 2011, the Company had asset retirement obligations of \$1.1 million and \$1.1 million, respectively. The related leasehold improvements are being amortized to depreciation expense over the term of the lease or the useful life of the assets, whichever is shorter. Related amortization expense was \$59,000 and \$4,000 for the three months ended September 30, 2012 and 2011, respectively, and \$188,000 and \$136,000 for nine months ended September 30, 2012 and 2011, respectively.

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

Balance at December 31, 2011	\$1,129	
Additions		
Foreign currency impacts and other adjustments	(91	)
Accretion expenses recorded during the period	91	
Balance at September 30, 2012	\$1,129	

Property and Equipment, net

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

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

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

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

Computers and software includes internal-use software that is acquired, internally developed or modified to meet the Company's internal needs. Amortization commences when the software is ready for its intended use and the amortization period is the estimated useful life of the software, generally three to five years. Capitalized costs primarily include contract labor and payroll costs of the individuals dedicated to the development of internal-use software. Capitalized software additions totaled approximately \$521,000 and \$1.2 million for the nine months ended September 30, 2012 and 2011, respectively, related to software development costs pertaining to the installation of a new financial reporting system. For the nine months ended September 30, 2012 and 2011, \$449,000 and \$308,000, respectively, of amortization expense was recorded and as of September 30, 2012 and December 31, 2011, the total unamortized cost of capitalized software was \$2.9 million and \$2.8 million, respectively.

#### Impairment of Long-Lived Assets

Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable or the estimated useful life is no longer appropriate. If indicators of impairment exist and the undiscounted projected cash flows associated with such assets are less than the carrying amount of the asset, an impairment loss is recorded to write the assets down to their estimated fair values. Fair value is estimated based on discounted future cash flows. The Company recorded losses on write off of production assets of \$5.5 million and zero during the nine months ended September 30, 2012 and 2011, respectively.

# Goodwill and Intangible Assets

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

There are several methods that can be used to determine the estimated fair value of the IPR&D acquired in a business combination. The Company 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.

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

The Company evaluates its intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased licenses and permits and are amortized on a straight-line basis over their estimated useful lives. Factors that could trigger an impairment review include significant under-performance relative to historical or projected future operating results, significant changes in the manner of use of the acquired assets or the strategy for overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, the Company makes an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, the Company will reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on the Company's reported financial results. The Company has not recognized any impairment charges on intangible assets through September 30, 2012.

In-Process Research and Development

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

# Noncontrolling Interest

Changes in noncontrolling interest ownership that do not result in a change of control and where there is a difference between fair value and carrying value are accounted for as equity transactions.

On April 14, 2010, the Company entered into a joint venture with Usina São Martinho. The carrying value of the noncontrolling interest from this joint venture is recorded in the equity section of the consolidated balance sheets (see Note 8).

On January 3, 2011, the Company entered into a production service agreement with Glycotech, Inc. ("Glycotech"). The Company has determined that the arrangement with Glycotech qualifies as a VIE. The Company determined that it is the primary beneficiary. The carrying value of the noncontrolling interest from this VIE is recorded in the equity section of the consolidated balance sheets (see Note 8).

# **Revenue Recognition**

The Company recognizes revenue from the sale of farnesene-derived products, delivery of research and development services, and from governmental grants. Through the third quarter of 2012, the Company also sold ethanol and reformulated ethanol-blended gasoline under short-term agreements at prevailing market prices but as of September 30, 2012 the Company has transitioned out of that business. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the fee is fixed or determinable, and collectibility is reasonably assured.

If sales arrangements contain multiple elements, the Company evaluates whether the components of each arrangement represent separate units of accounting. To date the Company has determined that all revenue arrangements should be accounted for as a single unit of accounting.

# Product Sales

Beginning in the second quarter of 2011, the Company began to sell farnesene-derived products, which were produced by contracted third parties. Through the third quarter of 2012, the Company also sold ethanol and reformulated ethanol-blended gasoline under short-term agreements at prevailing market prices but as of September 30, 2012 the Company has transitioned out of that business. Ethanol and reformulated ethanol-blended gasoline sales consisted of sales to customers through purchases from third-party suppliers in which the Company took physical control of the ethanol and reformulated ethanol-blended gasoline and accepted risk of loss. The Company's renewable product sales do not include rights of return. Returns are only accepted if the product does not meet product specifications and such nonconformity is communicated to the Company within a set number of days of delivery. Commencing April 1, 2012, the Company began offering a two year standard warranty provision for squalane products sold after March 31, 2012 if the products do not meet Company-established criteria as set forth in the Company's requerts and historical returns for companies in the cosmetics industry since the Company did not have a full two years of historical

return data. Revenues are recognized, net of discounts and allowances, once passage of title and risk of loss has occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met.

Grants and Collaborative Revenue

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

that are determined to be substantive and at risk at the inception of the arrangement, revenue is recognized upon achievement of the milestone and is limited to those amounts whereby collectibility is reasonably assured.

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

# Cost of Products Sold

Cost of products sold consists primarily of cost of purchased ethanol and reformulated ethanol-blended gasoline, terminal fees paid for storage and handling, transportation costs between terminals and changes in the fair value of derivative commodity instruments. Starting in the second quarter of 2011, cost of products sold also includes production costs of farnesene-derived products, which include cost of raw materials, amounts paid to contract manufacturers and period costs including inventory write-downs resulting from applying lower-of-cost-or-market inventory rules. Cost of farnesene-derived products sold also includes certain costs related to the scale-up in production of such products.

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

# Costs of Start-Up Activities

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

# Research and Development

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

#### Income Taxes

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

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

# **Currency Translation**

The Brazilian real is the functional currency of the Company's wholly-owned subsidiary in Brazil and also of the Company's joint venture with Usina São Martinho. Accordingly, asset and liability accounts of those operations are translated into United States dollars using the current exchange rate in effect at the balance sheet date and equity accounts are translated into United

States dollars using historical rates. The revenues and expenses are translated using the exchange rates in effect when the transactions occur. Gains and losses from foreign currency translation adjustments are included as a component of accumulated other comprehensive income (loss) in the consolidated balance sheets.

# Stock-Based Compensation

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

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

#### Comprehensive Income (Loss)

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

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

	September 30, 201	2 December 31, 2011
Foreign currency translation adjustment, net of tax	\$(12,479	) \$(5,924 )
Total accumulated other comprehensive loss	\$(12,479	) \$(5,924 )

Net Loss Attributable to Common Stockholders and Net Loss per Share

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

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

Nine Months Ended

	Three Mon September		211404		September	3(	),	
	2012		2011		2012		2011	
Numerator:								
Net loss attributable to Amyris, Inc. common stockholders	\$(20,293	)	\$(43,690	)	\$(161,647	)	\$(119,442	)
Denominator:								
Weighted-average shares of common stock outstanding used								
in computing net loss per share of common stock, basic and	58,964,226		45,031,613		55,552,949		44,507,686	
diluted								
Net loss per share attributable to common stockholders, basic and diluted	\$(0.34	)	\$(0.97	)	\$(2.91	)	\$(2.68	)

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

	Nine Months Ended September 30,		
	2012	2011	
Period-end stock options to purchase common stock	8,345,400	8,353,279	
Convertible promissory notes	11,077,785		
Period-end common stock subject to repurchase	301	10,335	
Period-end common stock warrants	21,087	5,136	
Period-end restricted stock units	1,712,899	375,189	
Total	21,157,472	8,743,939	

#### **Recent Accounting Pronouncements**

In May 2011, the FASB issued an amendment to an accounting standard related to fair value measurement. This amendment is intended to result in convergence between U.S. GAAP and International Financial Reporting Standards ("IFRS") requirements for measurement of and disclosures about fair value. This guidance clarifies the application of existing fair value measurements and disclosures, and changes certain principles or requirements for fair value measurements and disclosures. The amended guidance is effective for interim and annual periods beginning after December 15, 2011. The adoption of this amended guidance required expanded disclosure in the Company's consolidated financial statements but did not impact financial results.

In June 2011, the FASB issued an amendment to an accounting standard related to the presentation of the Statement of Comprehensive Income. This amendment requires companies to present the components of net income and other comprehensive income either as one continuous statement or as two consecutive statements. It eliminates the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity. The amended guidance is effective for interim and annual periods beginning after December 15, 2011 with full retrospective application required. Early adoption is permitted. The Company chose early adoption of this guidance effective its year ended December 31, 2011 through a separate presentation of its Consolidated Statement of Comprehensive Income for the years ended December 31, 2011, 2010 and 2009. The adoption of this amended guidance changed the financial statement presentation and required expanded disclosures in the Company's consolidated financial statements, but did not impact financial results.

In September 2011, the FASB approved a revised accounting standard update intended to simplify how an entity tests goodwill for impairment. The amendment will allow an entity to first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. An entity no longer will be required to calculate the fair value of a reporting unit unless the entity determines, based on a qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. This accounting standard update is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. The adoption of this amended guidance did not have any impact on the Company's financial results.

In December 2011, the International Accounting Standards Board ("IASB") and the FASB issued common disclosure requirements that are intended to enhance comparability between financial statements prepared on the basis of U.S. GAAP and those prepared in accordance with IFRS. This new guidance affects all entities with financial instruments or derivatives that are either presented on a net basis on the balance sheet or subject to an enforceable master netting arrangement or similar arrangement. While this guidance does not change existing offsetting criteria in U.S. GAAP or the permitted balance sheet presentation for items meeting the criteria, it requires an entity to disclose both net and gross information about assets and liabilities that have been offset and the related arrangements. Required disclosures

under this new guidance should be provided retrospectively for all comparative periods presented. This new guidance is effective for fiscal years beginning on or after January 1, 2013, and interim periods within those years, which would be the Company's first quarter of fiscal 2013. The Company does not expect that the adoption of this new guidance will have an impact on its financial position, results of operations or cash flows as it is disclosure only in nature.

In July 2012, the FASB issued an amended accounting standard update to simplify how entities test indefinite-lived intangible assets for impairment which improve consistency in impairment testing requirements among long-lived asset categories. The amended guidance permits an assessment of qualitative factors to determine whether it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying value. For assets in which this assessment concludes it is more likely

than not that the fair value is more than its carrying value, then the amended guidance eliminates the requirement to perform quantitative impairment testing as outlined in the previously issued standards. The amended guidance is effective for fiscal years beginning after September 15, 2012; however, early adoption is permitted. The Company does not expect this amended guidance to have an impact on the Company's financial results.

3. Fair Value Measurements

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

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

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

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

As of September 30, 2012, the Company's financial assets and financial liabilities are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	Balance as of September 30, 2012
Financial Assets				
Money market funds	\$20,718	\$—	\$—	\$20,718
Certificates of deposit	5,823	—	—	5,823
Derivative asset	—	—	—	
Total financial assets	\$26,541	\$—	\$—	\$26,541
Financial Liabilities				
Notes payable	\$—	\$1,762	\$—	\$1,762
Loans payable	—	21,133	—	21,133
Credit facilities	—	9,777	—	9,777
Convertible notes	—	—	63,278	63,278
Compound embedded derivative liability	—	—	10,263	10,263
Currency interest rate swap derivative liability	—	1,126	—	1,126
Total financial liabilities	\$—	\$33,798	\$73,541	\$107,339

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

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

Compound Embedded Derivative Liability

Balance at December 31, 2011	\$—	
Transfers in to Level 3	11,025	
Total (gain) losses included in other income (expense), net	(762	)
Balance at September 30, 2012	\$10,263	
Total (gain) losses included in other income (expense), net	(762	)

The compound embedded derivative liability, which is included in other liabilities, represents the value of the equity conversion option and a "make-whole" provision of outstanding convertible notes issued to Total Gas & Power USA SAS (see Note 6). There is no current observable market for this type of derivative and, as such, the Company determined the value of the embedded derivative using a Black-Scholes valuation model that combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of the Company's common stock into which the notes are convertible. The Company will mark the embedded derivative to market due to the conversion price not being indexed to the Company's own stock. Except for the "make-whole interest" provision included in the conversion option, which is only required to be settled in cash upon a change of control, at the noteholder's option, the embedded derivative will be settled in either cash or shares. As of September 30, 2012, the Company has enough common shares to settle the conversion option in shares.

The Company's financial assets and financial liabilities as of December 31, 2011 are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	Balance as of December 31, 2011
Financial Assets				
Money market funds	\$57,127	\$—	\$—	\$57,127
Certificates of Deposit	27,384			27,384
Total financial assets	\$84,511	\$—	\$—	\$84,511
Financial Liabilities				
Derivative liabilities	\$18	\$—	\$—	\$18
Total financial liabilities	\$18	\$—	\$—	\$18

# Derivative Instruments

The Company's derivative instruments included Chicago Board of Trade (CBOT) ethanol futures and Reformulated Blendstock for Oxygenate Blending (RBOB) gasoline futures. All derivative commodity instruments were recorded at fair value on the consolidated balance sheets. None of the Company's derivative instruments were designated as a hedging instrument. Changes in the fair value of these non-designated hedging instruments were recognized in cost of products sold in the condensed consolidated statements of operations.

In June 2012, the Company entered into a loan agreement with Banco Pine S.A. under which the bank provided the Company with a short term loan of R\$52.0 million (approximately US\$25.6 million based on the exchange rate as of September 30, 2012) (the "Bridge Loan"). At the time of the Bridge Loan, the Company also entered into a currency interest rate swap arrangement with Banco Pine with respect to the repayment of R\$22.0 million (approximately US\$10.8 million based on the exchange rate of as of September 30, 2012). The swap arrangement exchanges the principal and interest payments under the Bridge Loan for alternative principal and interest payments that are subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap has a fixed interest rate of 3.94%. Changes in the fair value of the swap are recognized in other income (expense) in the condensed consolidated statements of operations.

Derivative instruments measured at fair value as of September 30, 2012 and December 31, 2011, and their classification on the consolidated balance sheets and consolidated statements of operations, are presented in the following tables (in thousands except contract amounts)

Asset/Liability as of

	September 30,	2012	December 31	, 2011
	Quantity of		Quantity of	
Type of Derivative Contract	Short	Fair Value	Short	Fair Value
	Contracts		Contracts	
Regulated fixed price futures contracts, included as liability in accounts payable	—	\$—	22	\$18
Currency interest rate swap, included as net liability in other long term liability	1	\$—	_	\$—

		Three Months H	Ended September	Nine Month	s Ended	
Type of Derivative	Income	30,		September 3	30,	
Contract	Statement Classification	2012	2011	2012	2011	
		Gain (Loss) Re	cognized	Gain (Loss)	Recognized	
Regulated fixed price futures contracts	Cost of products sold	\$(31)	\$625	\$(288	) \$(2,103	)
Currency interest rate swap	Other income (expense), net	\$82	\$—	\$(1,133	) \$—	

#### 4. Balance Sheet Components

#### Investments

The following table summarizes the Company's investments as of September 30, 2012 (in thousands):

	September 30, 2012		
	Amortized	Unrealized Gain	Foir Voluo
	Cost	(Loss)	I'all value
Short-Term Investments			
Certificates of Deposit	\$56	\$—	\$56
Total short-term investments	\$56	\$—	\$56

The following table summarizes the Company's investments as of December 31, 2011 (in thousands):

	December 31, 2011		
	Amortized	Unrealized Gain	<sup>1</sup> Eair Valua
	Cost	(Loss)	Fall value
Short-Term Investments			
Certificates of Deposit	\$7,889	\$—	\$7,889
Total short-term investments	\$7,889	\$—	\$7,889

#### Inventories, net

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

	September 30, 2012	December 31, 2011
Raw materials	\$1,805	\$2,191
Work-in-process	5,105	1,237
Finished goods	1,401	5,642
Inventories, net	\$8,311	\$9,070

# Prepaid and Other Current Assets

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

	September 30, 2012	December 31, 2011
Advances to contract manufacturers <sup>(1)</sup>	\$820	\$10,748
Manufacturing catalysts	2,644	3,929
Recoverable VAT and other taxes	4,468	2,193

Other	2,063	3,003
Prepaid and other current assets	\$9,995	\$19,873

(1) At September 30, 2012 and December 31, 2011, this amount includes \$785,000 and \$748,000, respectively, of the current

unamortized portion of equipment costs funded by the Company to a contract manufacturer. The related amortization is being offset against purchases of inventory.

## Property and Equipment, net

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

	September 30, 2012	December 31, 2011
Leasehold improvements	\$39,839	\$40,011
Machinery and equipment	61,238	59,657
Computers and software	7,548	6,491
Furniture and office equipment	2,365	2,223
Vehicles	511	596
Construction in progress	93,825	45,318
	\$205,326	\$154,296
Less: accumulated depreciation and amortization	(40,623)	(26,195)
Property and equipment, net	\$164,703	\$128,101

Property and equipment includes \$10.2 million and \$13.7 million of machinery and equipment and furniture and office equipment under capital leases as of September 30, 2012 and December 31, 2011, respectively. Accumulated amortization of assets under capital leases totaled \$4.4 million and \$4.7 million as of September 30, 2012 and December 31, 2011, respectively.

Depreciation and amortization expense, including amortization of assets under capital leases, was \$3.1 million and \$3.0 million for the three months ended September 30, 2012 and 2011, respectively and was \$10.4 million and \$7.5 million for the nine months ended September 30, 2012 and 2011, respectively.

The Company capitalizes interest cost incurred to construct plant and equipment. The capitalized interest is recorded as part of the depreciable cost of the asset to which it relates to and this amount is amortized over the asset's estimated useful life. Interest cost capitalized as of September 30, 2012 and December 31, 2011was \$309,000 and zero, respectively.

#### Other Assets

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

	September 30, 2012	December 31, 2011
Deferred charge asset <sup>(1)</sup>	\$—	\$18,792
Deposits on property and equipment, including taxes	2,907	17,455
Advances to contract manufacturers, net of current portion <sup>(2)</sup>	2,419	2,866
Recoverable taxes on purchased property and equipment and inventories <sup>(3)</sup>	12,686	2,075
Other	2,121	1,813
Total other assets	\$20,133	\$43,001

<sup>(1)</sup> The deferred charge asset relates to the collaboration agreement between the Company and Total (see Note 9).

At September 30, 2012 and December 31, 2011, the amount of \$2.4 million and \$2.9 million, respectively, relates <sup>(2)</sup> to the non-current unamortized portion of equipment costs funded by the Company to a contract manufacturer. The related amortization is being offset against purchases of inventory.

(3) At September 30, 2012 and December 31, 2011, \$12.7 million and \$2.1 million, respectively, are recoverable taxes from the Brazilian government.

Accrued and Other Current Liabilities

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

	September 30, 2012	December 31, 2011
Professional services	\$1,908	\$4,384
Accrued vacation	2,442	2,761
Payroll and related expenses	6,058	6,343
Construction in progress	1,069	4,992
Tax-related liabilities	620	2,180
Deferred rent, current portion	1,403	1,274
Contractual obligations to contract manufacturers	8,435	—
Customer advances	970	3,667
Refundable exercise price on early exercise of stock options	1	30
Other	1,155	5,351
Total accrued and other current liabilities	\$24,061	\$30,982
Other Liabilities Other liabilities are comprised of the following (in thousands):		
	September 30, 2012	December 31, 2011
Contingently repayable advance from related party collaborator <sup>(1)</sup>	\$—	\$31,922
Bonus payable to contract manufacturer, non-current	·	2,500
Contractual obligations to contract manufacturers, non-current	4,000	
Fair market value of swap obligations	1,126	_
Asset retirement obligations	1,129	1,129
Fair value of compound embedded derivative liability <sup>(2)</sup>	10,263	_
Other	2,375	1,534
Total other liabilities	\$18,893	\$37,085

(1) The contingently repayable advance from related party collaborator relates to the collaboration agreement between the Company and Total which was settled in the third quarter of 2012.

(2) The compound embedded derivative liability represents the fair value of the equity conversion feature and a "make-whole" feature of the outstanding promissory notes issued to Total.

In November 2011, the Company and Total entered into an amendment of their Technology License, Development, Research and Collaboration Agreement (the "Amendment"). The Amendment provided for an exclusive strategic collaboration for the development of renewable diesel products and contemplated that the parties would establish a joint venture (the "JV") for the production and commercialization of such renewable diesel products on an exclusive, worldwide basis. In addition, the Amendment contemplated providing the JV with the right to produce and commercialize certain other chemical products on a non-exclusive basis. The amendment further provided that definitive agreements to form the JV had to be in place by March 31, 2012 or such other date as agreed to by the parties or the renewable diesel program, including any further collaboration payments by Total related to the renewable diesel program, would terminate. In the second quarter of 2012, the parties extended the deadline to June 30, 2012, and, through June 30, 2012 the parties were engaged in discussions regarding the structure of future payments related to the program, until the amendment was superseded by a further amendment in July 2012 (as discussed in Note 9).

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

million in 2013, which amounts would be considered part of the \$50.0 million contemplated by the Collaboration Agreement. In addition to these payments, Total further agreed to fund 50% of all remaining research and development costs for the renewable diesel program under the Amendment.

Under the Amendment, Total had an option for a period of 90 days, following the completion of the renewable diesel program on December 31, 2013 (or any other date as determined by the management committee to achieve the end-project milestone), to notify the Company that it did not wish to pursue production or commercialization of renewable diesel under the Amendment. If

Total exercised this right, all of Total's intellectual property rights that were developed during the renewable diesel program would terminate and would be assigned to the Company, and the Company would be obligated to pay Total specified royalties based on the Company's net income in consideration of the benefits the Company derived from the technology and intellectual property developed during the renewable diesel development project. Such royalty payments would commence on the royalty notification date and end on the date when the Company had paid Total an aggregate amount equal to \$150.0 million. Such royalty payments would be equal to (20%) of Company and Company-affiliate (i) net income on a yearly basis derived from licenses or sales of intellectual property developed under the collaboration other than to the extent such licenses or sales relate to the use of such intellectual property for the non-exclusive JV products, and (ii) net income of the Company on a consolidated basis other than that derived from the jet fuel development program with Total or from the non-exclusive JV products.

In addition, under the Amendment, if the Company sold all or substantially all of its renewable diesel business prior to the time the aggregate royalty amount has been paid, the Company would be required to pay Total fifty percent (50%) of the net proceeds from such sale up to the then-remaining unpaid amount of the aggregate royalty amount. Net income was to be calculated in accordance with generally accepted accounting principles consistently applied by the Company and in the event that the foregoing net income was negative for a given fiscal quarter, the Company would not be required to pay any royalty for such fiscal quarter). Beginning on the sixth year from the royalty notification date, the aforementioned royalty would be additionally derived from the non-exclusive JV products.

The Company concluded that there was a significant amount of risk associated with the development of these products and therefore the arrangement is within the scope of ASC 730-20 Research and Development. The Company also determined that until Total exercised its royalty option under the Amendment, it would be uncertain that financial risk involved with research and development was transferred from the Company to Total. Accordingly, the funds received from Total for the diesel product research and development activities were recorded as a contingently repayable advance from the collaborator as part of other liabilities. Depending on the resolution of Total's royalty option contingency, the Company will record this arrangement as a contract to perform research and development services or as an obligation to repay the funds.

In July 2012, the Company entered into a further amendment of the collaboration agreement with Total that expanded Total's investment in the biofene collaboration, incorporated the development of certain joint venture products for use in diesel and jet fuel into the scope of the collaboration, and changed the structure of the funding from Total to include a convertible debt mechanism (see Note 9). As a part of the July 2012 amendments, Total's royalty option contingency related to diesel was removed and jet fuel collaboration was combined with the expanded biofene collaboration. As a result, \$23.3 million of payments received from Total that had been recorded as an advance from the collaborator were no longer contingently repayable and were recorded as a contract to perform research and development services, by reducing the capitalized deferred charge asset of \$14.4 million and recording revenue of \$8.9 million.

## 5. Commitments and Contingencies

## Capital Leases

In March 2008, the Company executed an equipment financing agreement intended to cover certain qualifying research and laboratory hardware and software. In January 2009, the agreement was amended to increase the financing amount. During the years ended December 31, 2011, 2010, and 2009, the Company financed certain purchases of hardware equipment and software of approximately zero, \$1.4 million and \$4.8 million, respectively. Pursuant to the equipment financing agreement, the Company financed the equipment with the transactions representing capital leases. Accordingly, fixed assets and capital lease liabilities were recorded at the present values of the future lease payments of \$0.9 million and \$3.1 million at September 30, 2012 and December 31, 2011, respectively. The incremental borrowing rates used to determine the present values of the future lease payments was 9.5%. The capital

lease obligations expire at various dates, with the latest maturity in March 2013. In connection with the agreement entered into in 2008, the Company issued a warrant to purchase shares of the Company's convertible preferred stock (see Note 11).

In December 2011, the Company executed an equipment financing agreement intended to cover certain qualifying research and laboratory hardware. During the year ended December 31, 2011, the Company financed certain purchases of hardware equipment of \$3.0 million. Pursuant to the equipment financing agreement, the Company financed the equipment with transactions representing capital leases. This sale/leaseback transaction resulted in a \$1.3 million unrealized loss which is being amortized over the life of the assets under lease. Accordingly, the Company recorded a capital lease liability at the present value of the future lease payments of \$2.5 million at September 30, 2012 and \$3.4 million at December 31, 2011 The incremental borrowing rate used to determine the present values of the future lease payments was 6.5%. The lease obligations expire on January 1, 2015. In connection with the equipment financing transaction, the Company issued a warrant to purchase shares of the Company's common

stock (see Note 11). Future minimum payments under this sales/leaseback agreement as of September 30, 2012 are as follows (in thousands):

Tonows (in thousands):		
Years ending December 31:	Sale/Lease	back
2012 (Three Months)	\$274	
2013	1,098	
2014	1,007	
2015	289	
2016		
Thereafter		
Total future minimum lease payments	2,668	
Less: amount representing interest	(207	)
Present value of minimum lease payments	2,461	
Less: current portion	(966	)
Long-term portion	\$1,495	
The Company recorded interest expense in connection with its capital leases of \$81,000 and \$	\$126,000 for the t	hraa

The Company recorded interest expense in connection with its capital leases of \$81,000 and \$126,000 for the three months ended September 30, 2012 and 2011, respectively, and \$321,000 and \$437,000 for the nine months ended September 30, 2012 and 2011, respectively. Future minimum payments under capital leases, including the sale/leaseback equipment financing agreement, as of September 30, 2012 are as follows (in thousands):

Years ending December 31:	Capital Leases
2012 (Three Months)	\$816
2013	1,489
2014	1,007
2015	289
2016	—
Thereafter	
Total future minimum lease payments	3,601
Less: amount representing interest	(235)
Present value of minimum lease payments	3,366
Less: current portion	(1,871)
Long-term portion	\$1,495

## **Operating Leases**

The Company has noncancelable operating lease agreements for office, research and development and manufacturing space in the United States that expire at various dates, with the latest expiration in May 2018 with an estimated annual rent payment of approximately \$6.0 million. In addition, the Company leases facilities in Brazil pursuant to noncancelable operating leases that expire at various dates, with the latest expiration in November 2016 and with an estimated annual rent payment of approximately \$0.6 million.

In 2007, the Company entered into an operating lease for its headquarters in Emeryville, California, with a term of ten years commencing in May 2008. As part of the operating lease agreement, the Company received a tenant improvements allowance of \$11.4 million. The Company recorded the allowance as deferred rent and associated expenditures as leasehold improvements that are being amortized over the shorter of their useful life or the term of the lease. In connection with the operating lease, the Company elected to defer a portion of the monthly base rent due under the lease and entered into notes payable agreements with the lessor for the purchase of certain tenant improvements. In October 2010, the Company amended its lease agreement with the lessor of its headquarters, to lease up to approximately 22,000 square feet of research and development and office space. In return for the removal of the early termination clause in its amended lease agreement, the Company received approximately \$1.0 million

from the lessor in December 2010.

The Company recognizes rent expense on a straight-line basis over the noncancelable lease term and records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability. Where leases contain escalation clauses, rent abatements, and/or concessions, such as rent holidays and landlord or tenant incentives or allowances, the Company applies them in the determination of straight-line rent expense over the lease term. Rent expense was \$1.2 million and \$1.2 million for the three months ended September 30, 2012 and 2011, respectively, and \$3.7 million and \$3.5 million for the nine months ended September 30, 2012 and 2011, respectively.

In January 2011, the Company entered into a right of first refusal agreement with respect to a facility and site in Leland, North Carolina leased by Glycotech covering a two year period commencing in January 2011. Under the right of first refusal agreement, the lessor agrees not to sell the facility and site leased by Glycotech during the term of the production service agreement. If the lessor is presented with an offer to sell, or decides to sell, an adjacent parcel, the Company has a right of first refusal to acquire the adjacent parcel or leased property.

In February 2011, the Company commenced payment of rent related to an operating lease on real property owned by Usina São Martinho in Brazil. In conjunction with a joint venture agreement (see Note 7) with the same entity, the real property will be used by the joint venture entity, SMA Indústria Química S.A. ("SMA"), for the construction of a production facility. This lease has a term of 20 years commencing in February 2011 with an estimated annual rent payment of approximately \$47,000.

In February 2011, the Company entered into an operating lease for certain equipment owned by GEA Engenharia de Processos e Sistemas Industriais Ltda ("GEA") in Brazil. The equipment under this lease was used by the Company in its production activities in Brazil. This lease had a term of one year commencing in March 2011 and was terminated in June 2012 and the equipment was returned to GEA.

In March 2011, the Company entered into an operating lease on real property owned by Paraíso Bioenergia S.A. ("Paraíso Bioenergia") in Brazil. In conjunction with a supply agreement (see Note 9) with the same entity, the real property is being used by the Company for the construction of an industrial facility. This lease has a term of 15 years commencing in March 2011 with an estimated annual rent payment of approximately \$118,000.

In August 2011, the Company notified the lessor of its leased office facilities in Brazil of the Company's termination of its existing lease effective November 30, 2011. At the same time, the Company entered into an operating lease for new office facilities in Campinas, Brazil. The new lease has a term of 5 years commencing in November 2011 with an estimated annual rent payment of approximately \$375,000.

Future minimum payments under operating leases as of September 30, 2012, are as follows (in thousands):

Years ending December 31:	Operating	Operating	Total
Tears ending December 51.	Leases -	Leases -	Operating
	Facilities	Land	Leases
2012 (Three Months)	\$1,658	\$32	\$1,690
2013	6,385	166	6,551
2014	6,516	165	6,681
2015	6,644	165	6,809
2016	6,630	165	6,795
Thereafter	9,233	1,758	10,991
Total future minimum lease payments	\$37,066	\$2,451	\$39,517

#### **Guarantor Arrangements**

The Company has agreements whereby it indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at the Company's request in such capacity. The term of the indemnification period is for the officer or director's lifetime. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer insurance policy that limits its exposure and enables the Company to recover a portion of any future amounts paid. As a result of its insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal. Accordingly, the Company had no liabilities recorded for these agreements as of September 30, 2012 and December 31, 2011.

The Company has a facility ("FINEP Credit Facility") with a financial institution to finance a research and development project on sugarcane-based biodiesel (see Note 6). The FINEP Credit Facility provides for loans of up to an aggregate principal amount of R\$6.4 million (approximately US\$3.2 million based on the exchange rate as of September 30, 2012) which is guaranteed by a chattel mortgage on certain equipment of the Company. The Company's total acquisition cost for the equipment under this guarantee is approximately R\$6.0 million (approximately US\$3.0 million based on the exchange rate as of September 30, 2012). Subject to compliance with certain terms and conditions under the FINEP Credit Facility, four disbursements of the loan will become available to the Company for withdrawal, as described in more detail in Note 6. After the release of the first disbursement, prior to any subsequent drawdown from the FINEP Credit Facility, the Company also needs to provide bank letters of guarantee of up to R\$3.3 million (approximately US\$1.6 million based on the exchange rate as of September 30, 2012).

The Company has a credit facility ("BNDES Credit Facility") with a financial institution to finance a production site in Brazil. This credit facility is collateralized by a first priority security interest in certain of the Company's equipment and other tangible assets totaling R\$24.9 million (approximately US\$12.3 million based on the exchange rate at September 30, 2012). The Company is a parent guarantor for the payment of the outstanding balance under the BNDES Credit Facility. Additionally, the Company is required to provide a bank guarantee under the BNDES Credit Facility.

The Company has signed loan agreements and a security agreement where the Company pledged certain farnesene production system as collateral (the fiduciary conveyance of movable goods) with each of Nossa Caixa and Banco Pine. Under the loan agreements, Banco Pine, agreed to lend R\$22.0 million and Nossa Caixa agreed to lend R\$30.0 million as financing for capital expenditures relating to the Company's manufacturing facility at Paraíso Bioenergia in Brazil. The Company's total acquisition cost for the farnesene production system pledged as collateral under these agreements is approximately R\$68.0 million (approximately US\$33.5 million based on the exchange rate as of September 30, 2012). The Company is a also a parent guarantor for the payment of the outstanding balance under these loan agreements.

Under an operating lease agreement for its office facilities in Brazil, which commenced on November 15, 2011, the Company is required to maintain restricted cash or letters of credit equal to three months of rent of approximately R\$191,000 (approximately US\$94,000 based on the exchange rate as of September 30, 2012) in the aggregate as a guarantee that the Company will meet its performance obligations under such operating lease agreement.

## Other Matters

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

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

The Company is subject to disputes and claims that arise or have arisen in the ordinary course of business and that have not resulted in legal proceedings or have not been fully adjudicated. For example, one of our contract

manufacturers recently sent us a notice of termination and demanded payment of certain ongoing costs and removal of our equipment in connection with our decision to halt production at that plant. Another of our contract manufacturers similarly made claims that we had breached an agreement by suspending production at that plant. The Company has accrued for losses it deems to be probable arising from these claims. However, such matters are subject to many uncertainties and outcomes are not predictable with assurance. Therefore, if one or more of these legal matters were resolved against the Company for amounts in excess of management's expectations, the Company's consolidated financial statements for the relevant reporting period could be materially adversely affected.

## 6. Debt

Debt is comprised of the following (in thousands):

	September 30, 2012	December 31, 2011
Credit facilities	\$10,238	\$18,852
Notes payable	1,689	3,113
Convertible notes	67,591	—
Loans payable	25,892	19,359
Total debt	105,410	41,324
Less: current portion	(2,121	) (28,049 )
Long-term debt	\$103,289	\$13,275

Credit Facility

In November 2010, the Company entered into a credit facility with Financiadora de Estudos e Projetos ("FINEP"), a state-owned company subordinated to the Brazilian Ministry of Science and Technology. This FINEP Credit Facility was extended to partially fund expenses related to the Company's research and development project on sugarcane-based biodiesel ("FINEP Project") and provides for loans of up to an aggregate principal amount of R\$6.4 million (approximately US\$3.2 million based on the exchange rate as of September 30, 2012) which is secured by a chattel mortgage on certain equipment of the Company as well as by bank letters of guarantee. Subject to compliance with certain terms and conditions under the FINEP Credit Facility, four disbursements of the loan will become available to the Company for withdrawal. The first disbursement received in February 2011 was approximately R\$1.8 million (approximately US\$0.9 million based on the exchange rate as of September 30, 2012) and the next three disbursements will each be approximately R\$1.6 million (approximately US\$0.8 million based on exchange rate as of September 30, 2012). As of September 30, 2012 and December 31, 2011 there was R\$1.8 million (approximately US\$0.9 million based on the exchange rate at September 30, 2012) outstanding under this FINEP Credit Facility.

Interest on loans drawn under this credit facility is fixed at 5.0% per annum. In case of default under or non-compliance with the terms of the agreement, the interest on loans will be dependent on the long-term interest rate as published by the Central Bank of Brazil ("TJLP"). If the TJLP at the time of default is greater than 6.0%, then the interest will be 5.0% plus a TJLP adjustment factor, otherwise the interest will be at 11.0% per annum. In addition, a fine of up to 10.0% shall apply to the amount of any obligation in default. Interest on late balances will be 1.0% interest per month, levied on the overdue amount. Payment of the outstanding loan balance is being made in 81 monthly installments which commenced in July 2012 and extends through March 2019. Commencing in March 2011, interest on loans drawn and other charges have been paid on a monthly basis.

The FINEP Credit Facility contains the following significant terms and conditions

The Company will share with FINEP the costs associated with the FINEP Project. At a minimum, the Company will contribute from its own funds approximately R\$14.5 million (approximately US\$7.1 million based on the exchange rate as of September 30, 2012) of which the Company expects R\$11.1 million to be contributed prior to the release of the second disbursement, which is expected to occur in 2013;

After the release of the first disbursement, prior to any subsequent drawdown from the FINEP Credit Facility, the Company is required to provide bank letters of guarantee of up to R\$3.3 million in aggregate (approximately US\$1.6 million based on the exchange rate as of September 30, 2012);

Amounts released from the FINEP Credit Facility must be completely used by the Company towards the FINEP Project within 30 months after the contract execution.

Notes Payable

During the period between May 2008 and October 2008, the Company entered into notes payable agreements with the lessor of its headquarters under which it borrowed a total of \$3.3 million for the purchase of tenant improvements, bearing an interest rate of 9.5% per annum and to be repaid over a period of 55 to 120 months. As of September 30, 2012 and December 31, 2011, a principal amount of \$1.6 million and \$2.0 million, respectively, was outstanding under these notes payable.

In connection with the operating lease for its headquarters (see Note 5) in Emeryville, California, the Company elected

to defer a portion of monthly base rent due under the lease. In June 2011, a deferred rent obligation of \$1.5 million resulting from this election became due and payable in 24 equal monthly installments of approximately \$63,000. As such, the Company reclassified this obligation from Other Liabilities to Notes Payable. In June 2012, the Company paid off the outstanding notes payable balance. As of September 30, 2012 and December 31, 2011, a principal amount of zero and \$1.1 million, respectively, was outstanding under this note payable.

## Convertible Notes

In February 2012, the Company completed the sale of unsecured senior convertible promissory notes in an aggregate principal amount of \$25.0 million pursuant to a Securities Purchase Agreement, between the Company and certain investment funds affiliated with Fidelity Investments Institutional Services Company, Inc. The offering consisted of the sale of 3% senior unsecured convertible promissory notes with a March 1, 2017 maturity date and a conversion price equal to \$7.0682 per share of common stock, subject to adjustment for proportional adjustments to outstanding common stock and anti-dilution provisions in case of dividends and distributions. As of September 30, 2012, the notes were convertible into an aggregate of up to 3,536,968 shares of common stock. The note holders have a right to require repayment of 101% of the principal amount of the notes in an acquisition of the Company, and the notes provide for payment of unpaid interest on conversion following such an acquisition if the note holders do not require such repayment. The securities purchase agreement and notes include covenants regarding payment of interest, maintaining the Company's listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, material adverse effect clauses and breaches of the covenants in the securities purchase agreement and notes, with default interest rates and associated cure periods applicable to the covenant regarding SEC reporting.

In July 2012, the Company entered into a further amendment of the collaboration agreement with Total that expanded Total's investment in the biofene collaboration, incorporated the development of certain joint venture products for use in diesel and jet fuel into the scope of the collaboration, and changed the structure of the funding from Total to include a convertible debt mechanism (see Note 9).

The purchase agreement for the notes related to the funding from Total provides for the sale of an aggregate of \$105.0 million in notes as follows:

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

The purchase agreement provides that additional notes may be sold in subsequent closings in July 2013 (for

cash proceeds to the Company of \$30.0 million) and July 2014 (for cash proceeds to the Company of \$21.7 million, which would be settled in an initial installment of \$10.85 million payable at such closing and a second installment of \$10.85 million payable in January 2015).

The notes each have a March 1, 2017 maturity date and a conversion price equal to \$7.0682 per share of Company common stock. The notes bear interest of 1.5% per year (with a default rate of 2.5%), accruing from date of funding and payable at maturity or on conversion or a change of control where Total exercises the right to require the Company to repay the notes. Accrued interest is canceled if the notes are canceled based on a "Go" decision.

The notes become convertible into Company common stock (i) within 10 trading days prior to maturity (if they are not canceled as described above prior to their maturity date), (ii) on a change of control of the Company, (iii) if Total is no

longer the largest stockholder of the Company following a "No-Go" decision (subject to a six-month lock-up with respect to any shares of common stock issued upon conversion), and (iv) on a default by the Company. If Total makes a final "Go" decision, then the notes will be exchanged by Total for equity interests in the Fuels JV, after which the notes will not be convertible and any obligation to pay principal or interest on the notes will be extinguished. If Total makes a "No-Go" decision, outstanding notes will remain outstanding and become payable at maturity.

The conversion price of the notes is subject to adjustment for proportional adjustments to outstanding common stock and under anti-dilution provisions in case of certain dividends and distributions. Total has a right to require repayment of

101% of the principal amount of the notes in the event of a change of control of the Company and the notes provide for payment of unpaid interest on conversion following such a change of control if Total does not require such repayment. The purchase agreement and notes include covenants regarding payment of interest, maintenance of the Company's listing status, limitations on debt, maintenance of corporate existence, and filing of SEC reports. The notes include standard events of default resulting in acceleration of indebtedness, including failure to pay, bankruptcy and insolvency, cross-defaults, and breaches of the covenants in the purchase agreement and notes, with added default interest rates and associated cure periods applicable to the covenant regarding SEC reporting.

## Loans Payable

In December 2009, the Company entered into a loans payable agreement with the lessor of its Emeryville pilot plant under which it borrowed a total of \$250,000, bearing an interest rate of 10.0% per annum and to be repaid over a period of 96 months. As of September 30, 2012 and December 31, 2011, a principal amount of \$184,000 and \$204,000, respectively, was outstanding under the loan.

In December 2011, the Company entered into a loan agreement with Banco Pine under which Banco Pine provided the Company with a short term loan of R\$35.0 million (approximately US\$17.2 million based on the exchange rate as of September 30, 2012). Such loan was an advance on anticipated July 2012 financing from Nossa Caixa Desenvolvimento, ("Nossa Caixa"), the Sao Paulo State development bank, and Banco Pine, under which Banco Pine and Nossa Caxia would provide the Company with loans of up to approximately R\$52.0 million (approximately US\$25.6 million based on the exchange rate as of September 30, 2012) as financing for capital expenditures relating to the Company's manufacturing facility at Paraíso Bioenergia. The interest rate for the loan was 119.2% of the Brazilian interbank lending rate (approximately 12.3% on an annualized basis). The principal and interest of loans under the loan agreement, as amended, matured and were required to be repaid on August 15, 2012. In June 2012, the Company entered into a separate loan agreement with Banco Pine under which Banco Pine provided the Company with a short-term bridge loan of R\$52.0 million (approximately US\$25.6 million based on the exchange rate as of September 30, 2012). The bridge loan was an additional advance on the anticipated Banco Pine and Nossa Caixa financing described above. The interest rate for the bridge loan was 0.4472% monthly (approximately 5.5% on an annualized basis). The principal and interest under the bridge loan matured and were required to be repaid on September 19, 2012, subject to extension by Banco Pine. The bridge loan was in addition to the R\$35.0 million short term loan to the Company described above. At the time of this bridge loan, the Company entered into a currency interest rate swap arrangement with the lender for R\$22.0 million (approximately US\$10.8 million based on the exchange rate as of September 30, 2012). The swap arrangement exchanged the principal and interest payments under the bridge loan for alternative principal and interest payments that were subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap had a fixed interest rate of 3.94%. In July 2012, the Company entered into a Note of Bank Credit and a Fiduciary Conveyance of Movable Goods agreements with each of Nossa Caixa and Banco Pine. Under these agreements, the Company's total acquisition cost for the farnesene production system pledged as collateral is approximately R\$68.0 million (approximately US\$33.5 million based on the exchange rate as of September 30, 2012). The Company is a also a parent guarantor for the payment of the outstanding balance under these loan agreements.

Under such instruments, the Company could borrow an aggregate of R\$52.0 million (approximately US\$25.6 million based on the exchange rate as of September 30, 2012) as financing for capital expenditures relating to the Company's manufacturing facility at Paraíso Bioenergia in Brazil. Under the loan agreements, Banco Pine, agreed to lend R\$22.0 million and Nossa Caixa agreed to lend R\$30.0 million. The funds for the loans are provided by Banco Nacional de Desenvolvimento Econômico e Social ("BNDES"), but are guaranteed by the lenders. The loans have a final maturity date of July 15, 2022 and bear a fixed interest rate of 5.5% per year. For the first two years that the loans are outstanding, the Company is required to pay interest only on a quarterly basis. After August 15, 2014, the Company is required to pay equal monthly installments of both principal and interest for the remainder of the term of the loans. In July 2012, the Company repaid the outstanding bridge loans of R\$52.0 million and R\$35.0 million from Banco

Pine.

# Letters of Credit

In November 2008, the Company entered into the Credit Agreement with a financial institution to finance the purchase and sale of fuel and for working capital requirements, as needed. In October 2009, the agreement was amended to decrease the maximum amount that the Company may borrow under such facility. The Credit Agreement, as amended, provided, as of March 31, 2012, for an aggregate maximum availability up to the lower of \$20.0 million and the borrowing base as defined

in the agreement, and was subject to a sub-limit of \$5.7 million for the issuance of letters of credit and a sub-limit of \$20.0 million for short-term cash advances for product purchases. The Credit Agreement was collateralized by a first priority security interest in certain of the Company's present and future assets. Amyris was a parent guarantor for the payment of the outstanding balance under the Credit Agreement. Outstanding advances bore an interest rate at the Company's option of the bank's prime rate plus 1.0% or the bank's cost of funds plus 3.5%. In April 2012, the Company, entered into an Amendment to the credit agreement, effective as of April 14, 2012 to extend the maturity date pending the Company's transition out of its ethanol and reformulated ethanol-blended gasoline business, and its plan to repay all amounts remaining outstanding under the Credit Agreement was terminated. As of September 30, 2012, the Credit Agreement was terminated. As of September 30, 2012 and December 31, 2011, the Company had no outstanding advances and had zero and \$5.0 million, respectively, in outstanding letters of credit under the Credit Agreement.

In June 2012, the Company entered into a letter of credit agreement for \$953,000, under which it provided a letter of credit to the landlord for its headquarters in Emeryville, California in order to cover the security deposit on the lease. The letter of credit is secured by a certificate of deposit. Accordingly, the Company recorded \$954,000 as restricted cash as of September 30, 2012.

## Revolving Credit Facility

In December 2010, the Company established a revolving credit facility with a financial institution that provided for loans and standby letters of credit of up to an aggregate principal amount of \$10.0 million with a sublimit of \$5.0 million on standby letters of credit. Interest on loans drawn under this revolving credit facility was equal to (i) the Eurodollar Rate plus 3.0%; or (ii) the Prime Rate plus 0.5%. In case of default or non-compliance with the terms of the agreement, the interest on loans was Prime Rate plus 2.0%. The credit facility was collateralized by a first priority security interest in certain of the Company's present and future assets. In April 2012, the Company paid \$7.7 million of its outstanding loans under the Credit Facility. In May 2012, the Company entered into a letter agreement with the bank amending the credit facility agreement to reduce the committed amount under the credit facility from \$10.0 million. The amendment also modified the current ratio covenant to require a ratio of current assets to current liabilities of at least 1.3:1 (as compared to 2:1 in the Credit Facility), and required the Company to maintain unrestricted cash of at least \$15.0 million in its account with the Bank. In June 2012, the credit facility was terminated and, as of September 30, 2012, no loans or letters of credit were outstanding.

## **BNDES** Credit Facility

In December 2011, the Company entered into a credit facility (the "BNDES Credit Facility") in the amount of R\$22.4 million (approximately US\$11.0 million based on the exchange rate as of September 30, 2012) with BNDES, a government owned bank headquartered in Brazil. This BNDES facility was extended as project financing for a production site in Brazil. The credit line is divided into an initial tranche for up to approximately R\$19.1 million and an additional tranche of approximately R\$3.3 million that becomes available upon delivery of additional guarantees. The credit line is available for 12 months from the date of the Credit Agreement, subject to extension by the lender. The principal of the loans under the BNDES Credit Facility is required to be repaid in 60 monthly installments, with the first installment due in January 2013 and the last due in December 2017. Interest is due initially on a quarterly basis and the first installment was paid in March 2012. From and after January 2013, payments of principal and interest will be due on a monthly basis. The loaned amounts carry interest of 7% per year. Additionally, a credit reserve charge of 0.1% on the unused balance from each credit installment from the day immediately after it is made available through its date of use, when it is paid.

The BNDES Credit Facility is denominated in Brazilian reais. The credit facility is collateralized by a first priority security interest in certain of the Company's equipment and other tangible assets totaling R\$24.9 million (approximately US\$12.3 million based on the exchange rate as of September 30, 2012). The Company is a parent guarantor for the payment of the outstanding balance under the BNDES Credit Facility. Additionally, the Company is required to provide a bank guarantee equal to 10% of the total approved amount (R\$22.4 million), the Company is required to provide additional bank guarantees equal to 90% of each such advance, plus additional Company guarantees equal to at least 130% of such advance. The BNDES Credit Facility or related documents, defaults in respect of other indebtedness, bankruptcy, insolvency and inability to pay debts when due, material judgments, and changes in control of Amyris Brasil. If any event of default occurs, the Lender may terminate its commitments and declare immediately due all borrowings under the facility. As of September 30, 2012 the Company had R\$19.1 million (approximately US\$9.4 million based on the exchange rate as of September 30, 2012) in

outstanding advances under the BNDES Credit Facility.

Future minimum payments under the debt agreements as of September 30, 2012 are as follows (in thousands):

Years ending December 31:	Notes Payable	Convertible Notes	Loans Payable	Credit Facility
2012 (Three Months)	\$156	\$192	\$670	\$370
2013	445	760	1,534	2,632
2014	355	760	2,495	2,497
2015	355	765	3,914	2,361
2016	355	761	3,823	2,226
Thereafter	479	81,958	19,400	2,255
Total future minimum payments	2,145	85,196	31,836	12,341
Less: amount representing interest	(456)	(17,605	) (5,944 )	(2,103)
Present value of minimum debt payments	1,689	67,591	25,892	10,238
Less: current portion	(371)		(127)	(1,623)
Noncurrent portion of debt	\$1,318	\$67,591	\$25,765	\$8,615

## 7. Joint Ventures

SMA Indústria Química S.A.

On April 14, 2010, the Company established SMA, a joint venture with Usina São Martinho, to build a manufacturing facility. SMA is located at the Usina São Martinho mill in Pradópolis, São Paulo state, Brazil. SMA has a 20 year initial term.

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

The joint venture agreements require the Company to fund the construction costs of the new facility and Usina São Martinho would reimburse the Company up to R\$61.8 million (approximately US\$30.4 million based on the exchange rate as of September 30, 2012) of the construction costs after SMA commences production. Post commercialization, the Company would market and distribute Amyris renewable products and Usina São Martinho would sell feedstock and provide certain other services to SMA. The cost of the feedstock to SMA would be a price that is based on the average return that Usina São Martinho could receive from the production of its current products, sugar and ethanol. The Company would be required to purchase the output of SMA for the first four years at a price that guarantees the return of Usina São Martinho's investment plus a fixed interest rate. After this four year period, the price would be set to guarantee a break-even price to SMA plus an agreed upon return.

Under the terms of the joint venture agreements, if the Company becomes controlled, directly or indirectly, by a competitor of Usina São Martinho, then Usina São Martinho has the right to acquire the Company's interest in SMA. If Usina São Martinho becomes controlled, directly or indirectly, by a competitor of the Company, then the Company has the right to sell its interest in SMA to Usina São Martinho. In either case, the purchase price is determined in accordance with the joint venture agreements, and the Company would continue to have the obligation to acquire products produced by SMA for the remainder of the term of the supply agreement then in effect even though the

Company would no longer be involved in SMA's management.

Amyris has a 50% ownership interest in SMA. The Company has identified SMA as a VIE. The Company is the primary beneficiary and consequently consolidates SMA's operations in its financial statements.

Joint Venture with Cosan

In June 2011, the Company entered into joint venture agreements with Cosan Combustíveis e Lubrificantes S.A. and Cosan S.A. Industria e Comércio (such Cosan entities, collectively or individually, "Cosan"), related to the formation of a joint venture (the "Novvi JV"), to focus on the worldwide development, production and commercialization of base oils made from Biofene

produced by the Novvi JV or purchased from the Company or a contract manufacturer. The Company and Cosan are establishing entities related to the joint venture in both Brazil and the United States.

Under the joint venture agreements, the Novvi JV would undertake, on a worldwide basis, the development, production and commercialization of certain classes of base oils produced from Biofene for use in lubricants products in the automotive, commercial and industrial markets. The agreements provide that (i) the Company will perform research and development activities on behalf of the Novvi JV under a research services arrangement and will grant a royalty-free license to the Novvi JV to use the Company's technology to develop, produce, market and distribute renewable base oils for use in lubricant products sold worldwide, and (ii) Cosan will provide technical expertise and use commercially reasonable efforts to contribute a base oils offtake agreement with a third party to the Novvi JV.

Subject to certain exceptions for the Company, the joint venture agreements provide that the Novvi JV will be the exclusive means through which the Company and Cosan will engage in the worldwide development and commercialization of specified classes of renewable base oils that are derived from Biofene or, under certain circumstances, from other intermediate molecules or technologies. The JV has certain rights of first refusal with respect to alternative base oil technologies that may be acquired by the Company or Cosan during the term of the Novvi JV.

Under the joint venture agreements, the Company and Cosan each own 50% of the Novvi JV and each party will share equally in any costs and any profits ultimately realized by the JV. The joint venture agreement has an initial term of 20 years from the date of the agreement, subject to earlier termination by mutual written consent or by a non-defaulting party in the event of specified defaults by the other party (including breach by a party of any material obligations under the joint venture agreements). The Shareholders' Agreement has an initial term of 10 years from the date of the agreement, subject to earlier termination if either the Company or Cosan ceases to own at least 10% of the voting stock of the Novvi JV.

The Company has identified Novvi S.A., the initial Brazilian JV entity formed, as a VIE. The power to direct activities, which most significantly impact the economic success of the joint venture, is equally shared between the Company and Cosan, who are not related parties. Accordingly, the Company is not the primary beneficiary and therefore will account for its investment in the JV entity using the equity method. The Company will periodically review its consolidation analysis on an ongoing basis. As of September 30, 2012, the carrying amounts of the unconsolidated JV entity's assets and liabilities were not material to the Company's consolidated financial statements.

In September 2011, the U.S. JV entity, Novvi LLC was formed. The Company and Cosan are still finalizing operating agreements for this new entity. As of September 30, 2012, there had been no activity in this joint venture.

## 8. Noncontrolling Interest

## Redeemable Noncontrolling Interest

In December 2009, Amyris Brasil sold 1,111,111 of its shares representing a 4.8% interest in Amyris Brasil for R\$10.0 million. This redeemable noncontrolling interest was reported in the mezzanine equity section of the consolidated balance sheet because the Company was then subject to a contingent put option under which it could have been required to repurchase an interest in Amyris Brasil from the noncontrolling interest holder.

In March 2010, Amyris Brasil sold an additional 853,333 shares of its stock, an incremental 3.4% interest, for R\$3.0 million. In May 2010, Amyris Brasil sold an additional 1,111,111 shares of its stock, an incremental 4.07% interest, for R\$10.0 million.

Under the terms of the agreements with these Amyris Brasil investors, the Company had the right to require the investors to convert their shares of Amyris Brasil into shares of common stock at a 1:0.28 conversion ratio. On September 30, 2010, in connection with the Company's IPO, shares of Amyris Brasil held by these investors were converted into 861,155 shares of the Company's common stock. The remaining noncontrolling interest as of September 30, 2010 was converted to common stock and additional paid-in capital.

At the closing of the IPO, the Company recorded a one-time beneficial conversion feature charge of \$2.7 million associated with the conversion of the shares of Amyris Brasil held by investors into shares of Amyris, Inc. common stock, which impacted earnings per share for the year ended December 31, 2010.

The following table provides a roll forward of the redeemable noncontrolling interest (in thousands):

Balance as of December 31, 2009	\$5,506	
Proceeds from redeemable noncontrolling interest	7,041	
Conversion of shares of Amyris Brasil S.A. subsidiary held by third parties into common stock	(11,870	)
Foreign currency translation adjustment	217	
Net loss	(894	)
Balance as of December 31, 2010	\$—	

#### Noncontrolling Interest

#### SMA Indústria Química

The joint venture, SMA (see Note 7), is a VIE pursuant to the accounting guidance for consolidating VIEs because the amount of total equity investment at risk is not sufficient to permit SMA to finance its activities without additional subordinated financial support, as well as the related commercialization agreement provides a substantive minimum price guarantee. Under the terms of the joint venture agreement, the Company directs the design and construction activities, as well as production and distribution. In addition, the Company has the obligation to fund the design and construction activities until commercialization is achieved. Subsequent to the construction phase, both parties equally fund SMA for the term of the joint venture. Based on those factors, the Company was determined to have the power to direct the activities that most significantly impact SMA's economic performance and the obligation to absorb losses and the right to receive benefits. Accordingly, the financial results of SMA are included in the Company's consolidated financial statements and amounts pertaining to Usina São Martinho's interest in SMA are reported as noncontrolling interests in subsidiaries.

#### Glycotech

In January 2011, the Company entered into a production service agreement with Glycotech, whereby Glycotech is to provide process development and production services for the manufacturing of various Company products at its leased facility in Leland, North Carolina. The Company products to be manufactured by Glycotech will be owned and distributed by the Company. Pursuant to the terms of the agreement, the Company is required to pay the manufacturing and operating costs of the Glycotech facility which is dedicated solely to the manufacture of Amyris products. The initial term of the agreement is for a two year period commencing on February 1, 2011 and will renew automatically for successive one-year terms, unless terminated by the Company. On the same date as the production service agreement, the Company also entered into a right of first refusal agreement with the lessor of the facility and site leased by Glycotech during the term of the production service agreement. In the event that the lessor is presented with an offer to sell or decides to sell an adjacent parcel, the Company has the right of first refusal to acquire it.

The Company has determined that the arrangement with Glycotech qualifies as a VIE. The Company determined that it is the primary beneficiary of this arrangement since it has the power through the management committee over which it has majority control to direct the activities that most significantly impact the arrangement's economic performance. In addition, the Company is required to fund 100% of Glycotech's actual operating costs for providing services each month while the facility is in operation under the production service agreement. Accordingly, the Company consolidates the financial results of Glycotech. As of September 30, 2012, the carrying amounts of the consolidated VIE's assets and liabilities were not material to the Company's consolidated financial statements.

The table below reflects the carrying amount of the assets and liabilities of the two consolidated VIEs for which the Company is the primary beneficiary. The assets include \$24.9 million in property and equipment and \$4.8 million in other assets, and \$0.3 million in current assets. The liabilities include \$0.8 million in accounts payable and accrued current liabilities and \$0.1 million in loan obligations by Glycotech to a financial institution that are non-recourse to

the Company. The creditors of each consolidated VIE have recourse only to the assets of that VIE.

(In thousands)	September 30, 2012	December 31, 2011
Assets	\$29,964	\$22,094
Liabilities	\$921	\$2,873

The change in noncontrolling interest for the nine months ended September 30, 2012 and 2011 is summarized below (in

thousands):

	2012	2011	
Balance at January 1	\$(240	) \$2	
Addition to noncontrolling interest	—	369	
Foreign currency translation adjustment	209		
Loss attributable to noncontrolling interest	(772	) (437	)
Balance at September 30	\$(803	) \$(66	)

9. Significant Agreements

Research and Development Activities

**Total Collaboration Agreement** 

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

The collaboration agreement has an initial term of 12 years and is renewable by mutual agreement by the parties for additional three year periods. Neither the Company nor Total has the right to terminate the agreement voluntarily. The Company and Total each have the right to terminate the agreement in the event the other party commits a material breach, is the subject of certain bankruptcy proceedings or challenges a patent licensed to it under the collaboration agreement. Total also has the right to terminate the collaboration agreement in the event the Company undergoes a sale or change of control to certain entities. If the Company terminates the collaboration agreement due to a breach, bankruptcy or patent challenge by Total, all licenses the Company has granted to Total terminate except licenses related to products for which Total has made a material investment and licenses related to products with respect to which binding commercialization arrangements have been approved, which will survive subject, in most cases, to the payment of certain royalties by Total to the Company. Similarly, if Total terminates the collaboration agreement due to a breach, bankruptcy or patent challenge by the Company. Similarly, if Total terminates the collaboration agreement due to a breach, bankruptcy or patent challenge by the Company. Similarly, if Total terminates the collaboration agreement due to a breach, bankruptcy or patent challenge by the Company. Similarly, if Total terminates the collaboration agreement due to a breach, bankruptcy or patent challenge by the Company. Similarly, if Total has granted to the Company terminate except licenses related to products for which the Company has made a material investment, certain grant-back licenses

and licenses related to products with respect to which binding commercialization arrangements have been approved, which will survive subject, in most cases, to the payment of certain royalties to Total by the Company. On expiration of the collaboration agreement, or in the event the collaboration agreement is terminated for a reason other than a breach, bankruptcy or patent challenge by one party, licenses applicable to activities outside the collaboration generally continue with respect to intellectual property existing at the time of expiration or termination subject, in most cases, to royalty payments. There are circumstances under which certain of the licenses granted to Total will survive on a perpetual, royalty-free basis after expiration or termination of the collaboration agreement. Generally these involve licenses to use the Company's synthetic biology technology and core metabolic pathway for purposes of either independently developing further improvements to marketed collaboration technologies or products or the processes for producing them within a specified scope agreed to by the Company and Total prior to the time of expiration or termination, or independently developing early stage commercializing products developed from collaboration compounds that met certain performance criteria prior to the time the agreement expired or was terminated and commercializing products related to such

compounds. After the collaboration agreement expires, the Company may be obligated to provide Total with ongoing access to Amyris laboratory facilities to enable Total to complete research and development activities that commenced prior to termination.

In June 2010, concurrent with the collaboration agreement, the Company issued 7,101,548 shares of Series D preferred stock to Total for aggregate proceeds of approximately \$133.0 million at a per share price of \$18.75, which was lower than the per share fair value of common stock as determined by management and the Board of Directors. Due to the fact the collaboration agreement and the issuance of shares to Total occurred concurrently, the terms of both the collaboration agreement and the issuance of preferred stock were evaluated to determine whether their separately stated pricing was equal to the fair value of services and preferred stock. The Company determined that the fair value of Series D preferred stock was \$22.68 at the time of issuance and, therefore, the Company measured the preferred stock initially at its fair value with a corresponding reduction in the consideration for the services under the collaboration agreement. As revenue from collaboration agreement will be generated over a period of time based on the performance requirements, the Company recorded the difference between the fair value and consideration received for Series D preferred stock of \$27.9 million as a deferred charge asset within other assets at the time of issuance which will be recognized as a reduction to revenue in proportion to the total estimated revenue under the collaboration agreement. As of September 30, 2012 and December 31, 2011, the Company had recognized a cumulative reduction of \$27.9 million and \$9.1 million, respectively, against the deferred charge asset.

As a result of recording Series D preferred stock at its fair value, the effective conversion price was greater than the fair value of common stock as determined by management and the Board of Directors. Therefore, no beneficial conversion feature was recorded at the time of issuance. The Company further determined that the conversion option with a contingent reduction in the conversion price upon a qualified IPO was a potential contingent beneficial feature and, as a result, the Company calculated the intrinsic value of such conversion option upon occurrence of the qualified IPO. The Company determined that a contingent beneficial conversion feature existed and the Company recorded a charge within the equity section of its balance sheet, which impacted earnings per share for the year ended December 31, 2010, based upon the price at which shares were offered to the public in the IPO in relation to the adjustment provisions provided for the Series D preferred stock. Based on the IPO price of \$16.00 per share, the charge to net loss attributable to Amyris' common stockholders was \$39.3 million.

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

The Company also agreed with Total that, so long as Total holds at least 10% of the Company's voting securities, the Company will notify Total if the Company's Board of Directors seeks to cause the sale of the Company or if the Company receives an offer to be acquired. In the event of such decision or offer, the Company must provide Total with all information given to an offering party and certain other information, and Total will have an exclusive negotiating period of 15 business days in the event the Board of Directors authorizes the Company to solicit offers to buy the Company, or five business days in the event that the Company receives an unsolicited offer to be acquired. This exclusive negotiation period will be followed by an additional restricted negotiation period of 10 business days, during which the Company will be obligated to negotiate with Total and will be prohibited from entering into an agreement with any other potential acquirer. Total has also entered into a standstill agreement pursuant to which it agreed for a period of three years not to acquire in excess of the greater of 20% or the number of shares of Series D preferred stock purchased by Total (during the initial two years) or 30% (during the third year) of the Company's common stock without the prior consent of the Company's Board of Directors, except that, among other things, if

another person acquires more than Total's then current holdings of the Company's common stock, then Total may acquire up to that amount plus one share.

In November 2011, the Company and Total entered into an amendment of the collaboration agreement as described above in Note 4 under "Other Liabilities".

In July 2012, the Company entered into an amendment of its collaboration agreement with Total and related agreements. Under such July agreements, the scope of the collaboration initially contemplated by the parties under the November 2011 amendment described in Note 4, was expanded to encompass certain joint venture products for use in diesel and jet fuel on a worldwide basis and to provide a new structure for the research and development program and formation of the joint venture (the "Fuels JV") to commercialize the products encompassed by the diesel and jet fuel research and development program (the "Program").

Under the new agreements, the Company controls operations and execution of the Program subject to strategic and ultimate decision-making authority by a management committee composed of Company and Total representatives, and Total participates

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

The agreements contemplate that the research and development efforts under the Program may extend through 2016, with a series of "Go/No Go" decisions by Total through such date tied to funding by Total. Each funding tranche involves the issuance of senior unsecured convertible promissory notes by the Company to Total (see Note 6). The agreements provided for funding by Total of \$15.0 million in July 2012 and an additional \$15.0 million in September 2012. (Such funding occurred in July and September as contemplated by the agreements.) Further, Total will, if it chooses to proceed with the Program, fund an additional \$30.0 million in July 2013, \$10.85 million in July 2014 and \$10.85 million in January 2015. Thirty days following the earlier of the completion of the research and development program or December 31, 2016, Total has a final opportunity to decide whether or not to proceed with the Program.

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

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

For a "Go" decision by Total with respect to the whole Program, the parties would form the Fuels JV and the notes would be canceled.

For a "No-Go" decision by Total with respect to the whole Program, the consequences would be as described in the paragraph above regarding a decision by Total not to continue to fund the Program.

For a decision by Total to proceed with the jet fuel component of the Program and not the diesel component of the Program, 70% of the principal amount outstanding under the notes would remain outstanding and become payable by the Company and 30% of the outstanding principal of such notes would be canceled, the diesel product would no longer be included in the collaboration, the Fuels JV would not receive rights to products for use in diesel fuels, and the Fuels JV would be formed by the parties to commercialize products for use in jet fuels.

The agreements contemplate that the parties will finalize the structure for the Fuels JV in the future as set forth in the agreements and that the Fuels JV, if and when it is formed, would, subject to the conditions described below and absent other agreement, be owned equally (50%/50%) by the Company and Total. Under the agreements, the parties

will, prior to the projected completion date, enter into a shareholders' agreement governing the Fuels JV, agree on the budget and business plan for the Fuels JV, and form the Fuels JV. In addition, following a final "Go" decision, the parties would enter into the Fuels JV license agreements, contribution agreements and other agreements required to establish the Fuels JV and enable it to operate.

Within 30 days prior to the final "Go" decision, Total may declare a "deadlock" if the parties fail to come to agreement on various matters relating to the formation of the Fuels JV, at which point Total may (i) elect to declare a "No-Go" decision, which has the consequences described above, or (ii) initiate a process whereby the fair value of the proposed Fuels JV would be determined and the Company would then have the option to: (x) elect to sell to Total the assets that the Company would have been required to contribute to the Fuels JV for an amount equal to 50% of such fair value; (y) proceed with the formation of the Fuels JV (accepting Total's position with respect to the funding requirement of the Fuels JV) and becoming a 50% owner of the Fuels JV; or (z) proceed with the formation of the Fuels JV (accepting requirements of the Fuels JV), and then sell all or a portion of its 50% interest in the Fuels JV to Total for a price equal to the fair value multiplied by the

percentage ownership of the Fuels JV sold to Total.

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

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

In connection with the purchase agreement and sale of the Notes, the Company entered into a registration rights agreement. Under such agreement, the Company is obligated to file a registration statement on Form S-3 with the SEC registering the resale of all of the shares of Company common stock issuable upon conversion of the notes within 20 days prior to the maturity date of the notes or within 30 days following optional conversion. In addition, the Company is obligated to have the registration statement declared effective within 70-100 days following the filing depending on whether the Company receives comments from the SEC. If the registration statement filing is delayed or the registration statement is not declared effective within the foregoing time frames, the Company is required to make certain monthly payments to the Total.

As a result of the July 2012 amendments, \$23.3 million of payments received from Total that had been recorded as an advance from the collaborator were no longer contingently repayable and were recorded as a contract to perform research and development services, by reducing the capitalized deferred charge asset of \$14.4 million and recording revenue of \$8.9 million.

#### M&G Finanziaria Collaboration Agreement

In June 2010, the Company entered into a collaboration agreement with M&G Finanziaria S.R.L. ("M&G") to incorporate Biofene as an ingredient in M&G's polyethylene terephthalate, or PET, resins to be incorporated into containers for food, beverages and other products. In April 2011, Amyris and M&G entered into an amended and restated collaboration agreement to amend certain portions of the original agreement entered into in June 2010 and adding Chemtex Italia S.R.L. and Chemtex International Inc. (both wholly owned subsidiaries of M&G) to the collaboration agreement. Under the terms of the amended agreement, the Company and Chemtex International Inc. will share the costs incurred associated with the PET collaboration on a 50/50 basis. In addition, the amended agreement expanded the collaboration arrangement between the Company and M&G to include a cellulosic feasibility study with each party bearing its own costs associated with such feasibility study. The collaboration agreement also establishes the terms under which M&G may purchase Biofene from the Company upon successful completion of product integration.

Firmenich Collaboration and Joint Development Agreements

In November 2010, the Company entered into collaboration and joint development agreements with Firmenich SA ("Firmenich"), a flavors and fragrances company based in Geneva, Switzerland. Under the agreement, Firmenich will fund technical development at the Company to produce an ingredient for the flavors and fragrances market. The Company will manufacture the ingredient and Firmenich will market it, and the parties will share in any resulting economic value. The agreement also grants worldwide exclusive flavors and fragrances commercialization rights to Firmenich for the ingredient. In addition, Firmenich has an option to collaborate with the Company to develop a

second ingredient. In July 2011, the Company and Firmenich expanded their collaboration agreement to include a third ingredient. The collaboration and joint development agreements will continue in effect until the later of the expiration or termination of the development agreements or the supply agreements. The Company is also eligible to receive additional payments of up to \$6.0 million upon the achievement of certain performance milestones towards which the Company will be required to make a contributory performance. These milestones are accounted for under the guidance in the FASB accounting standard update related to revenue recognition under the milestone method. The Company concluded that these milestones are substantive. For the nine months ended September 30, 2012 and 2011, the Company recorded \$4.3 million and \$4.6 million, respectively, of revenue from the collaboration agreement with Firmenich. During the third quarter of 2012, the second milestone was reached and as a result \$2.0 million was recognized as revenue in the period.

## Michelin Collaboration Agreement

In September 2011, the Company entered into a collaboration agreement with Manufacture Francaise des Pneumatiques Michelin ("Michelin"). Under the terms of the collaboration agreement the Company and Michelin will collaborate on the development, production and worldwide commercialization of isoprene or isoprenol, generally for tire applications, using the

Company's technology. Under the agreement, Michelin has agreed to pay an upfront payment to the Company of \$5.0 million, subject to a reimbursement provision under which the Company would have to repay \$1.0 million if it fails to achieve specified future technical milestones. The agreement provides that, subject to achievement of technical milestones, Michelin can notify the Company of its desired date for initial delivery, and the parties will either collaborate to establish a production facility or use an existing Company facility for production. The agreement also includes a term sheet for a supply agreement that would be negotiated at the time the decision regarding production facilities is made. The agreement has an initial term that will expire upon the earlier of 42 months from the effective date and the completion of a development work plan. As of September 30, 2012, the Company had recorded the upfront payment of \$5.0 million from Michelin as deferred revenue.

## Manufacturing Agreements

In 2010 and 2011, the Company entered into contract manufacturing agreements with Biomin do Brasil Nutricão Animal Ltda. ("Biomin"), Tate & Lyle Ingredients Americas, Inc. ("Tate & Lyle"), Antibióticos, S.A. ("Antibióticos"), Albemarle Corporation ("Albemarle"), and Glycotech (see Note 8) to utilize their manufacturing facilities to produce Amyris products.

Under the terms of these contract manufacturing agreements, the Company provided necessary equipment for the manufacturing of its products, over which the Company retained ownership. The Company also reimbursed the contract manufacturers for an aggregate of \$13.8 million in expenditures related to the modification of their facilities. The Company recorded facility modification costs as other assets and amortized them as an offset against purchases of inventory. Certain of these contract manufacturing agreements also impose fixed purchase commitments on the Company, regardless of the production volumes.

Beginning in March 2012, the Company initiated a plan to shift a portion of its production capacity from the contract manufacturing facilities to a Company-owned plant that is currently under construction. As a result, the Company evaluated its contract manufacturing agreements and recorded a loss of \$31.2 million related to the write-off of \$10.0 million in facility modification costs and the recognition of \$21.2 million of fixed purchase commitments in the three months ended March 31, 2012. The Company recognized an additional charge of \$1.4 million associated with loss on fixed purchase commitments in the three months ended September 30, 2012. The Company computed the loss on facility modification costs and fixed purchase commitments using the same lower of cost or market approach that is used to value inventory. The computation of the loss on firm purchase commitments is subject to several estimates, including cost to complete and the ultimate selling price of any Company products manufactured at the relevant production facilities, and is therefore inherently uncertain. The Company also recorded a loss on write off of production assets of \$5.5 million related to Amyris-owned production equipment at contract manufacturing facilities in the quarter ended March 31, 2012. The Company will continue to evaluate the potential for losses in future periods based on updated production and sales price assumptions.

## Paraíso Bioenergia

In March 2011, the Company entered into a supply agreement with Paraíso Bioenergia. Under the agreement, the Company will construct fermentation and separation capacity to produce its products and Paraíso Bioenergia will supply sugar cane juice and other utilities. The Company will retain the full economic benefits enabled by the sale of Amyris farnesene-derived products over the lower of sugar or ethanol alternatives. In conjunction with the supply agreement, the Company also entered into an operating lease on real property owned by Paraíso Bioenergia. The real property is being used by the Company for the construction of an industrial facility (see Note 5).

Per the terms of the supply agreement, in the event that Paraíso is presented with an offer to sell or decides to sell the real property, the Company has the right of first refusal to acquire it. If the Company fails to exercise its right of first

refusal the purchaser of the real property will need to comply with the specific obligations of Paraíso Bioenergia to the Company under the lease agreement.

## Albemarle

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

within 30 days after termination of the agreement, at the Company's discretion and sole expense. In March 2012 the Company recorded a loss of \$10.0 million related to the write off of the facility modification costs, described above.

In addition, the Company was required to pay a one-time, non-refundable performance bonus of \$5.0 million if Albemarle delivered to the Company a certain quantity of the lubricant base stock by December 31, 2011 or \$2.0 million if Albemarle delivered the same quantity by January 31, 2012. Based on Albemarle's performance as of December 31, 2011, the Company concluded that Albemarle had earned the bonus and recorded a liability of \$5.0 million as of September 30, 2012. The bonus is payable in two payments: one payment of \$2.5 million on September 30, 2012 and one payment of \$2.5 million on March 31, 2013.

In February 2012, the Company entered into an amended and restated agreement with Albemarle, which superseded the original contract manufacturing agreement with Albemarle. The term of the new agreement continues through December 31, 2019. The agreement includes certain obligations for the Company to pay fixed costs totaling \$7.5 million, of which \$3.5 million and \$4.0 million are payable in 2012 and 2014, respectively. In the three months ended March 31, 2012, the Company recorded a corresponding loss related to these fixed purchase commitments, as described above. In addition, fixed costs of \$2.0 million per quarter are payable in 2013 if the Company exercises its option to have product manufactured in the facility in 2013. The agreement also includes variable pricing during the contract term.

## Supply Agreements

The Company has also entered into agreements to sell Biofene and its derivatives directly to various potential customers, including with Procter & Gamble Company ("P&G") for use in cleaning products, with M&G for use in plastics, with Kuraray Co., Ltd. ("Kuraray") for use in production of polymers, with Firmenich and Givaudan SA. ("Givaudan") for ingredients for the flavors and fragrances market, with Method Products, Inc. ("Method") for use in home and personal care products, and with Wilmar International Limited ("Wilmar") for use as a surfactant.

# Soliance Agreements

In June 2010, the Company entered into an agreement with Soliance for the development and commercialization of Biofene-based squalane for use as an ingredient in cosmetics products. In December 2011, the Company and Soliance entered into an agreement and release to terminate the collaboration agreement and any other obligations with respect to the proposed joint venture. As part of the termination agreement the parties agreed that for a period commencing October 1, 2011 and ending on December 31, 2013, Soliance will be paid a commission of 10% of amounts received by the Company from Nikko Chemicals Co., Ltd. ("Nikko") on quantities of squalane sold by the Company to Nikko with respect to Nikko's committed minimum purchase obligation pursuant to a distribution agreement, pursuant to which the Company appointed Soliance as its exclusive distributor to distribute the Company's squalane in the cosmetic market in the approved territory.

## Nikko Chemicals

In August 2011, the Company entered into an agreement with Nikko, a private limited company in Japan, for the sales of renewable squalane to Nikko (commencing in September 2011 and continuing for two years through the end of December 2013).

On October 6, 2011 (the Closing Date), the Company completed an acquisition of assets of Draths related to production of renewable chemicals. The acquisition was accounted for as a business combination. In connection with the acquisition, the Company issued 362,319 shares of common stock, of which 41,408 shares were held in escrow and paid \$2.9 million in cash. In the quarter ended June 30, 2012, the Company recovered 5,402 shares of common stock from the escrow in connection with certain Draths indemnification obligations under the purchase agreement.

The components of the purchase price allocation for Draths are as follows:

\$7,000
2,934
\$9,934
\$713
101
8,560
560
\$9,934

The Company allocated \$8.6 million of the purchase price of Draths to acquired IPR&D. This amount represents management's valuation of the fair value of assets acquired at the date of the acquisition. Management used the income approach to determine the estimated fair values of acquired IPR&D, applying a risk adjusted discount rate of 30% to the development project's cash flows. The discounted cash flow model applies probability weighting factors, based on estimates of successful product development and commercialization, to estimated future net cash flows resulting from projected revenues and related costs. These success rates take into account the stages of completion and the risks surrounding successful development and commercialization of the underlying products such as estimates of revenues and operating profits related to the IPR&D considering its stage of development; the time and resources needed to complete the development; the life of the potential commercialized product and associated risks, including the inherent difficulties and uncertainties in developing a product.

Goodwill totaling \$0.6 million represents the excess of the purchase price over the fair value of tangible and identifiable intangible assets acquired and is due primarily to synergies expected from combining the new genetic pathway with the Company's existing platform to accelerate development to get the technology to market sooner leading to increased market penetration from future products and customers.

The Draths business acquisition was a taxable transaction. For federal and state tax purposes, the above in-process research and development and goodwill is amortized over a 15-year period. The Company has determined that there are no significant differences in the tax basis of assets and the basis for financial reporting purposes. In addition, the business combination did not have any impact on the Company's deferred tax balance, net of the full valuation allowance, or to uncertain tax positions, at the acquisition date.

The Company applies the applicable accounting principles set forth in the U.S. Financial Accounting Standards Board's Accounting Standards Codification to its 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. The Company has used the "income method," which applies a probability weighting that considers the risk of development and commercialization, to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, pricing of similar products, and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written off, as appropriate. If the carrying amount of the asset is recorded. Any finding that the value of its intangible assets has been impaired would require the Company to write-down the impaired portion, which could reduce the value of its assets and reduce its net income for the year in which the related impairment charges occur.

# 11. Stockholders' Equity

Private Placement

In May 2012, the Company completed a private placement of its common stock of 1,736,100 shares of common stock at a

price of \$2.36 for aggregate proceeds of \$4.1 million.

In February 2012, the Company completed a private placement of its common stock of 10,160,325 shares of common stock at a price of \$5.78 for aggregate proceeds of \$58.7 million. In connection with this private placement, the Company entered into an agreement with an investor to purchase additional shares of Common Stock for an additional \$15.0 million upon satisfaction by the Company of criteria associated with the commissioning of the Company's Paraíso Bioenergia production plant in Brazil by March 2013. Additionally, such agreement granted certain investors Board designation rights and certain rights of first investment with respect to future issuances of the Company's securities.

## Common Stock

Pursuant to the Company's amended and restated certificate of incorporation, the Company is authorized to issue 100,000,000 shares of common stock. Holders of the Company's common stock are entitled to dividends as and when declared by the Board of Directors, subject to the rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date. The holder of each share of common stock is entitled to one vote.

### Preferred Stock

Pursuant to the Company's amended and restated certificate of incorporation, the Company is authorized to issue 5,000,000 shares of preferred stock. The Board of Directors has the authority, without action by its stockholders, to designate and issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. Prior to the closing of the Company's IPO, the Company had four series of convertible preferred stock outstanding, including Series D preferred stock issued to Total (see Note 9). As of September 30, 2012 and December 31, 2011, the Company had zero shares of convertible preferred stock outstanding.

## Common Stock Warrants

During the period from January 1, 2008 to September 30, 2010, the Company issued 182,405 warrants in connection with placement agent fees associated with its preferred stock issuance, capital and operating lease agreements and consulting services. Upon the closing of the Company's IPO on September 30, 2010, these outstanding convertible preferred stock warrants were automatically converted into common stock warrants to purchase 195,604 shares of common stock. In addition, the fair value of the convertible preferred stock warrants as of September 30, 2010, estimated to be \$2.3 million using the Black-Scholes option pricing model, was reclassified to additional paid in capital.

In December 2011, in connection with a capital lease agreement, the Company issued a warrant to purchase 21,087 shares of the Company's common stock at an exercise price of \$10.67 a share. The Company estimated the fair value of these warrants as of the issuance date to be \$193,000 and was recorded as other assets and amortized subsequently over the term of the lease. The fair value was based on the contractual term of the warrants of 10 years, risk free interest rate of 2.0%, expected volatility of 86% and zero expected dividend yield. This warrant remains unexercised and outstanding as of September 30, 2012.

Each of these warrants included a cashless exercise provision which permitted the holder of the warrant to elect to exercise the warrant without paying the cash exercise price, and receive a number of shares determined by multiplying (i) the number of shares for which the warrant is being exercised by (ii) the difference between the fair market value of the stock on the date of exercise and the warrant exercise price, and dividing such by (iii) the fair market value of the stock on the date of exercise. During the nine months ended September 30, 2012 and 2011, warrants were exercised with respect to zero and 190,468 shares, respectively through the cashless exercise provision and 77,087

shares of common stock were issued after deducting the shares to cover the cashless exercises. There were no warrants exercised during the three months ended September 30, 2012 and 2011.

As of September 30, 2012 and December 31, 2011, the Company had the following unexercised common stock warrants outstanding:

		Exercise	Shares as of	
Underlying Steels	Expiration Date	Price per	September 30,	December 31,
Underlying Stock		Share	2012	2011
Common Stock	1/31/2018	\$24.88		2,884
Common Stock	9/23/2018	\$25.26		2,252
Common Stock	12/23/2021	\$10.67	21,087	21,087
Total			21,087	26,223

### 12. Stock-Based Compensation Plans

### 2010 Equity Incentive Plan

The Company's 2010 Equity Incentive Plan ("2010 Equity Plan") became effective on September 28, 2010 and will terminate in 2020. Pursuant to the 2010 Equity Plan, any shares of the Company's common stock (i) issued upon exercise of stock options granted under the Company's 2005 Stock Option/Stock Issuance Plan (the "2005 Plan") that cease to be subject to such option and (ii) issued under the 2005 Plan that are forfeited or repurchased by the Company at the original purchase price will become part of the 2010 Equity Plan. Subsequent to the effective date of the 2010 Equity Plan, an additional 737,807 shares that were forfeited under the 2005 Plan were added to the shares reserved for issuance under the 2010 Equity Plan.

The number of shares reserved for issuance under the 2010 Equity Plan increase automatically on January 1<sup>st</sup> of each year starting with January 1, 2011, by a number of shares equal to 5.0% percent of the Company's total outstanding shares as of the immediately preceding December 31<sup>st</sup>. The Company's Board of Directors or the Leadership Development and Compensation Committee of the Board of Directors is able to reduce the amount of the increase in any particular year. The 2010 Equity Plan provides for the granting of common stock options, restricted stock awards, stock bonuses, stock appreciation rights, restricted stock units and performance awards. It allows for time-based or performance-based vesting for the awards. Options granted under the 2010 Equity Plan may be either incentive stock options ("ISOs") or non-statutory stock options ("NSOs"). ISOs may be granted only to Company employees (including officers and directors who are also employees). NSOs may be granted to Company employees, non-employee directors and consultants. The Company will be able to issue no more than 30,000,000 shares pursuant to the grant of ISOs under the 2010 Equity Plan. Options under the 2010 Equity Plan may be granted for periods of up to ten years. All options issued to date have had a ten year life. Under the plan, the exercise price of any ISOs and NSOs granted to a 10% stockholder may not be less than 110% of the fair value of the underlying stock on the date of grant. The options granted to date generally vest over four to five years.

As of September 30, 2012, options to purchase 5,031,057 shares of our common stock granted from the 2010 Equity Plan were outstanding and 2,508,896 shares of the Company's common stock remained available for future awards that may be granted from the 2010 Equity Plan. The options outstanding as of September 30, 2012 had a weighted-average exercise price of approximately \$11.24 per share.

### 2005 Stock Option/Stock Issuance Plan

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

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

As of September 30, 2012, options to purchase 3,254,343 shares of the Company's common stock granted from the 2005 Stock Option/Stock Issuance Plan remained outstanding and, as a result of the adoption of the 2010 Equity Incentive Plan discussed above, zero shares of the Company's common stock remained available for issuance under the 2005 Plan. The options outstanding under the 2005 Plan as of September 30, 2012 had a weighted-average exercise price of approximately \$7.83 per share.

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

## 2010 Employee Stock Purchase Plan

The 2010 Employee Stock Purchase Plan (the "2010 ESPP") became effective on September 28, 2010. The 2010 ESPP is designed to enable eligible employees to purchase shares of the Company's common stock at a discount. Each offering period is for one year and consists of two six-month purchase periods. Each twelve-month offering period generally commences on May 16<sup>th</sup>

and November 16<sup>th</sup>, each consisting of two six-month purchase periods. The purchase price for shares of common stock under the 2010 ESPP is the lesser of 85% of the fair market value of the Company's common stock on the first day of the applicable offering period or the last day of each purchase period. A total of 168,627 shares of common stock were initially reserved for future issuance under the 2010 Employee Stock Purchase Plan. During the first eight years of the life of the 2010 ESPP, the number of shares reserved for issuance increases automatically on January 1<sup>st</sup> of each year, starting with January 1, 2011, by a number of shares equal to 1% of the Company's total outstanding shares as of the immediately preceding December 31<sup>st</sup>. Pursuant to the automatic increase provision, an additional 459,325 shares were reserved for issuance under the automatic increase provision. The Company's Board of Directors or the Leadership Development and Compensation Committee of the Board of Directors is able to reduce the amount of the increase in any particular year. No more than 10,000,000 shares of the Company's common stock may be issued under the 2010 ESPP and no other shares may be added to this plan without the approval of the Company's stockholders.

During the three months ended September 30, 2012 and 2011, no shares of common stock were purchased under the 2010 ESPP and during the nine months ended September 30, 2012 and 2011, 454,010 and zero shares of common stock, respectively, were purchased under this stock purchase plan. At September 30, 2012, 311,857 shares of the Company's common stock remained available for issuance under the 2010 ESPP.

## Stock Option Activity

The Company's stock option activity and related information for the nine months ended September 30, 2012 was as follows:

	Number Outstanding	Weighted - Average Exercise Price	Weighted - Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Outstanding - December 31, 2011	8,377,016	\$14.05	7.9	\$ 29,127
Options granted	2,663,763	\$3.69		
Options exercised	(856,114)	\$0.72		
Options cancelled	(1,839,265)	\$16.45		
Outstanding - September 30, 2012	8,345,400	\$9.85	7.5	\$ 1,083
Vested and expected to vest after September 30, 2012	7,745,694	\$9.90	7.3	\$ 1,023
Exercisable at September 30, 2012	3,841,181	\$9.90	5.9	\$ 695

The aggregate intrinsic value of options exercised under all option plans was \$2.0 million and \$5.2 million for the three months ended September 30, 2012 and 2011, respectively, and \$2.7 million and \$27.4 million for the nine months ended September 30, 2012 and 2011, respectively, determined as of the date of option exercise.

The Company's restricted stock units ("RSUs") and restricted stock activity and related information for the nine months ended September 30, 2012 was as follows:

RSUs	Weighted	Weighted
	Average	Average

			Grant-Date Fair Value	Remaining Contractual Life (Years)
Outstanding - December 31, 2011	375,189		\$29.84	1.4
Awarded	1,964,000		\$3.69	
Vested	(415,792	)	\$13.47	
Forfeited	(210,498	)	\$15.34	
Outstanding - September 30, 2012	1,712,899		\$5.61	1.4
Expected to vest after September 30, 2012	1,482,729		\$5.61	1.4

RSUs are converted into common stock upon vesting. Upon the vesting of RSUs, the Company primarily uses the net share

settlement approach, where a portion of the shares are withheld and cancelled as settlement of statutory employee withholding taxes, which decreases the shares issued to the employee by a corresponding value.

The following table summarizes information about stock options outstanding as of September 30, 2012:

	<b>Options</b> Outstand	ing		<b>Options</b> Exercisabl	e
		Weighted -			
		Average	Weighted		Weighted
Exercise Price	Number of Option	nsRemaining	Average	Number of Options	s Average Exercise
		Contractual Life	<b>Exercise Price</b>		Price
		(Years)			
\$0.10-\$3.23	948,407	7.9	\$2.30	288,234	\$1.03
\$3.55—\$3.55	54,000	9.8	\$3.55	—	\$—
\$3.86—\$3.86	1,480,113	9.1	\$3.86	218,480	\$3.86
\$3.93—\$3.93	1,200,343	4.2	\$3.93	1,115,829	\$3.93
\$4.06—\$9.32	1,411,280	7.0	\$6.40	756,536	\$6.46
\$10.44—\$14.28	330,589	7.4	\$12.60	152,801	\$13.99
\$16.00—\$16.00	1,221,900	8.3	\$16.00	487,325	\$16.00
\$16.50—\$20.41	1,075,373	7.7	\$18.55	533,417	\$18.70
\$24.20—\$27.13	543,395	7.9	\$26.34	248,559	\$26.12
\$30.17—\$30.17	80,000	8.5	\$30.17	40,000	\$30.17
\$0.10-\$30.17	8,345,400	7.5	\$9.85	3,841,181	\$9.90

### Common Stock Subject to Repurchase

Historically under the 2005 Plan, the Company allowed employees to exercise options prior to vesting. The Company has the right to repurchase at the original purchase price any unvested (but issued) common shares upon termination of service of an employee. The consideration received for an early exercise of an option is considered to be a deposit of the exercise price and the related dollar amount is recorded as a liability. The shares and liability are reclassified into equity on a ratable basis as the award vests. The Company recorded a liability in accrued expenses of \$1,179 and \$30,000, respectively, relating to options for 301 and 7,929 shares of common stock that were exercised and unvested as of September 30, 2012 and December 31, 2011, respectively. These shares were subject to a repurchase right held by the Company and are included in issued and outstanding shares as of September 30, 2012 and December 31, 2011, respectively.

## Stock-Based Compensation Expense

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

	Three Months Ended September		Nine Months Ended Septemb	
	30,		30,	
	2012	2011	2012	2011
Research and development	\$1,450	\$1,711	\$4,521	\$4,697
Sales, general and administrative	4,515	5,162	16,879	14,139
Total stock-based compensation expense	\$5,965	\$6,873	\$21,400	\$18,836

Employee Stock-Based Compensation

During the three months ended September 30, 2012 and 2011, the Company granted options to purchase 431,860 and 228,750 shares of its common stock, respectively, to employees with weighted average grant date fair values of \$2.48 and \$14.48 per share, respectively. During the nine months ended September 30, 2012 and 2011, the Company granted options to purchase 2,660,763 and 2,478,125 shares of its common stock, respectively, to employees, with weighted average grant date fair values of \$2.40 and \$19.21 per share, respectively. As of September 30, 2012 and December 31, 2011, there were unrecognized compensation costs of \$41.8 million and \$54.7 million, respectively, related to outstanding employee stock options. The Company expects to recognize those costs over a weighted average period of 3 years as of September 30, 2012. Future option grants will increase the amount of compensation expense to be recorded in these periods.

In August 2012, the Company's CEO exercised outstanding options to purchase 668,730 shares of the Company's common stock and sold the shares to certain members of the Company's Board of Directors or their affiliates through a private sale at a price of \$3.70, which was greater than the fair market value of the stock at the date of sale. During the three and nine months ended September 30, 2012, the Company recorded \$388,000 in stock-based compensation expense as an excess of the sale price over the fair market value of shares in this transaction.

During the three months ended September 30, 2012 and 2011, 127,000 and 21,000 RSUs, respectively, were granted to employees with a weighted average service-inception date fair value of \$3.95 and \$24.50, respectively. During the nine months ended September 30, 2012 and 2011, 1,964,000 and 352,301 RSUs, respectively, were granted to employees with a weighted average service-inception date fair value of \$3.69 and \$29.85 per unit, respectively. The Company recognized a total of \$1.1 million and \$0.9 million, respectively, for the three months ended September 30, 2012 and 2011 and \$4.7 million and \$2.7 million, respectively, for the nine months ended September 30, 2012 and 2011 in stock-based compensation expense for RSUs granted to employees. As of September 30, 2012 and December 31, 2011, there were unrecognized compensation costs of \$7.5 million and \$6.0 million, respectively, related to these RSUs.

The Company also recognized stock-based compensation expense related to its 2010 ESPP of \$105,000 and \$518,000, respectively, during the three months ended September 30, 2012 and 2011, and \$701,000 and \$1,427,000, respectively, during the nine months ended September 30, 2012 and 2011.

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

	Three Months Ended September		Nine Months Ended September	
	30,		30,	
	2012	2011	2012	2011
Research and development	\$1,444	\$1,703	\$4,511	\$4,663
Sales, general and administrative	4,496	4,883	16,771	13,274
Total stock-based compensation expense	\$5,940	\$6,586	\$21,282	\$17,937

Employee stock-based compensation expense recognized for the three and nine months ended September 30, 2012 included zero and \$811,000, respectively related to option modifications. In the second quarter of 2012, as part of separation agreements with certain former senior employees, the Company agreed to accelerate the vesting of options for 698,886 shares of common stock and extend the exercise period for certain grants. The stock-based compensation expense above includes the impact of a repricing of stock options in June 2012 under which certain non-executive employees received a one-time reduction in the exercise price for such options with exercise perioes per share higher than \$24.00 held by U.S. employees of Amyris and the new exercise price for such options was \$16.00, our initial public offering price. The total amount of the stock-based charge associated with repricing was immaterial to the consolidated financial statements.

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

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

following weighted-average assumptions:

	Three Months Ended September N		Nine Months Ended September			mber	
	30,			30,			
	2012	2011		2012		2011	
Expected dividend yield		%	%		%		%
Risk-free interest rate	0.9	% 1.3	%	1.1	%	2.4	%
Expected term (in years)	5.9	5.1		6.0		5.8	
Expected volatility	79	% 85	%	76	%	86	%

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

Risk-Free Interest Rate—The risk-free interest rate was based on the market yield currently available on United States Treasury securities with maturities approximately equal to the option's expected term.

Expected Term—The expected term represents the period that the Company's stock-based awards are expected to be outstanding. The Company's assumptions about the expected term have been based on that of companies that have similar industry, life cycle, revenue, and market capitalization and the historical data on employee exercises.

Expected Volatility—The expected volatility is based on a combination of historical volatility for the Company's stock and the historical stock volatilities of several of the Company's publicly listed comparable companies over a period equal to the expected terms of the options, as the Company does not have a long trading history.

Fair Value of Common Stock— Prior to the IPO, the fair value of the shares of common stock underlying the stock options was determined by the Board of Directors. Because there was no public market for the Company's common stock, the Board of Directors determined the fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including valuation of comparable companies, sales of convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock and general and industry specific economic outlook, amongst other factors. The Company's common stock started trading in the NASDAQ Global Market under ticker symbol AMRS on September 28, 2010. Consequently, after the IPO, the fair value of the shares of common stock underlying the stock options is the closing price on the option grant date.

Forfeiture Rate—The Company estimates its forfeiture rate based on an analysis of its actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior, and other factors. The impact from a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated by the Company, the Company may be required to record adjustments to stock-based compensation expense in future periods.

Each of the inputs discussed above is subjective and generally requires significant management and director judgment to determine.

## Nonemployee Stock-Based Compensation

During the three months ended September 30, 2012 and 2011, the Company granted zero and 15,000 options, respectively, and for the nine months ended September 30, 2012 and 2011 3,000 and 15,000 options, respectively, to purchase shares of common stock to nonemployees in exchange for services. Stock-based compensation expense of \$21,000 and \$227,000 was recorded for the three months ended September 30, 2012 and 2011, respectively, and \$74,000 and \$699,000 for the nine months ended September 30, 2012 and 2011, respectively, for options granted to nonemployees. The nonemployee options were valued using the Black-Scholes option pricing model.

During the three months ended September 30, 2012 and 2011, zero and 2,855 restricted stock units, respectively, were granted to nonemployees. Stock-based compensation expense of \$4,000 and \$61,000 respectively, was recorded for the three months ended September 30, 2012 and 2011. During the nine months ended September 30, 2012 and 2011, zero and 32,855 restricted stock units, respectively, were granted to nonemployees and a total of \$45,000 and \$200,000 respectively, in stock-based compensation expense was recognized by the Company.

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

Three Months Ended SeptemberNine Months Ended September30,30,

	2012	2011	2012	2011	
Expected dividend yield	—	% —	%	% —	%
Risk-free interest rate	1.3	% 1.5	% 1.5	% 2.3	%
Expected term (in years)	6.9	7.8	7.1	7.9	
Expected volatility	79	% 85	% 77	% 86	%

# 13. Employee Benefit Plan

The Company established a 401(k) Plan to provide tax deferred salary deductions for all eligible employees. Participants may make voluntary contributions to the 401(k) Plan up to 90% of their eligible compensation, limited by certain Internal Revenue

Service restrictions. The Company does not match employee contributions.

### 14. Related Party Transactions

The Company has entered into a license agreement with University of California, Berkeley. A co-founder and advisor to the Company is a professor at the University of California, Berkeley. The Company paid the advisor zero during the nine months ended September 30, 2012 and 2011, respectively.

During 2008, the Company entered into an agreement with a venture capital group to provide strategic advisory services to Amyris and its then majority owned subsidiary, Amyris Brasil. One of its former directors is also a member of the Company's Board of Directors. Under the agreement, the Company issued options to the venture capital group, which vest and become exercisable based on the service of the former director of the group on the Company's Board of Directors (see Note 12).

On June 21, 2010 the Company entered into agreements with Total relating to the Company's Series D preferred stock and collaboration for the research, development, production and commercialization of chemical and/or fuel products (see Note 9).

In November 2011, the Company and Total entered into an amendment of their Technology License, Development, Research and Collaboration Agreement (see Note 4).

On October 6, 2011, the Company completed a business combination with Draths. In connection with the acquisition, the Company issued 362,319 shares of the Company's common stock, of which 41,408 shares were held in escrow and paid \$2.9 million in cash. In the quarter ended June 30, 2012, the Company recovered 5,402 shares of common stock from the escrow in connection with certain Draths indemnification obligations under the purchase agreement. One of the Company's board members was also on the board of Draths.

In February 2012, the Company completed a private placement of 10,160,325 shares of common stock at a price of \$5.78 per share for aggregate proceeds of \$58.7 million pursuant to a securities purchase agreement, among the Company and existing certain investors, including Total and Maxwell (Mauritius) Pte Ltd, each a beneficial owner of more than 5% of our existing common stock at the time of the transaction. In addition, members of the Company's Board of Directors and certain parties related to such directors participated in the offering.

In May 2012, the Company completed a private placement of 1,736,100 shares of common stock at a price of \$2.36 for aggregate proceeds of \$4.1 million pursuant to a series of Common Stock Purchase Agreements, among the Company and members of the Company's Board of Directors and certain parties related to such directors.

In July 2012, the Company entered into various agreements with Total relating to the Program (see Note 9).

## 15. Income Taxes

For the three months ended September 30, 2012 and 2011, the Company recorded a provision for income taxes of \$260,000 and \$474,000, respectively, and for the nine months ended September 30, 2012 and 2011 a provision for income taxes of \$753,000 and \$299,000, respectively. The provision for incomes for three and nine months ended September 30, 2012 consisted of an accrual of Brazilian withholding tax on an intercompany interest liability. The provision for income taxes in the three months ended September 30, 2011 of \$474,000 was for the accrual of Brazilian withholding tax on the intercompany interest liability while the provision for income taxes of \$299,000 for the nine months ended September 30, 2011 consisted of this \$474,000 accrual partially offset by \$175,000 benefit from

income taxes resulting from valuation allowance adjustments due to an increase in currency translation adjustments classified as other comprehensive losses. Other than the above mentioned provision for income tax, no additional provision for income taxes has been made, net of the valuation allowance, due to cumulative losses since the commencement of operations.

The Company is currently under audit by the US Internal Revenue Service for tax year 2008. As of September 30, 2012, the Company has received Form 4549-A, Income Tax Discrepancy Adjustments (Examination No Change Report) which concluded that there were no adjustments resulting from the audit by the US Internal Revenue Service for the tax year 2008. As of September 30, 2012, the Company has not yet received the Area Director's final approval of the report. Therefore, the tax year 2008 remains open.

## 16. Reporting Segments

The chief operating decision maker for the Company is the chief executive officer. The chief executive officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by geographic region, for purposes of allocating resources and evaluating financial performance. The Company has one business activity comprised of development and sales of fuels and farnesene-derived products and there are no segment managers who are held accountable for operations, operating results or plans for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reportable segment and operating unit structure.

Revenues by geography are based on the location of the customer. The following tables set forth revenue and long-lived assets by geographic area (in thousands):

Revenues

	Three Months Ended September		Nine Months Ended Septem	
	30,		30,	
	2012	2011	2012	2011
United States	\$3,905	\$35,441	\$46,807	\$100,799
Brazil	1,053	6	2,741	6
Europe	12,452	829	15,785	4,647
Asia	1,698	—	2,507	
Total	\$19,108	\$36,276	\$67,840	\$105,452

Long-Lived Assets

	September 30,	December 31,
	2012	2011
United States	\$73,536	\$76,108
Brazil	89,190	48,240
Europe	1,977	3,753
Total	\$164,703	\$128,101
Total	$\psi_{104}, 105$	\$120,101

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### 17. Subsequent Events

On October 1, 2012, the Company paid the \$2.5 million first installment of its non-refundable performance bonus liability to Albemarle (see Note 9).

On October 18, 2012, the Company and Antibióticos entered into a Termination Agreement whereby the Company agreed to pay Antibióticos  $\notin$ 3.5 million (approximately US\$4.5 million as of September 30, 2012), which represents all of the Company's outstanding financial obligations under a manufacturing agreement entered into by both parties in 2011. The payment of  $\notin$ 3.5 million (approximately US\$4.5 million as of September 30, 2012) will be paid in four installments with the remaining three payments scheduled to be paid in the fourth quarter of 2012. As of September 30, 2012, the Company paid the first installment of  $\notin$ 250,000 (approximately \$0.3 million as of September 30, 2012) and had accrued a liability of US\$4.3 million for the remaining obligation on this termination agreement.

# ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Forward-Looking Statements

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and the related notes that appear elsewhere in this Form 10-Q. These discussions contain forward-looking statements reflecting our current expectations that involve risks and uncertainties which are subject to safe harbors under the Securities Act of 1933, as amended, or the Securities Act, and the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements include, but are not limited to, statements concerning our strategy, future production capacity and other aspects of our future operations, ability to improve our production efficiencies, future financial position, future revenues, projected costs, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," " "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part II, Item 1A, "Risk Factors," in this Quarterly Report on Form 10-Q and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.

### Trademarks

Amyris<sup>®</sup>, the Amyris logo, Biofene<sup>®</sup> and No Compromise<sup>®</sup> are trademarks or registered trademarks of Amyris, Inc. This report also contains trademarks and trade names of other businesses that are the property of their respective holders.

### Overview

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 were incorporated in 2003 and commenced research, development, marketing and administrative activities in 2005. To further develop our business we have established two subsidiaries, Amyris Brasil, which oversees the establishment and expansion of our production in Brazil, and Amyris Fuels. Through the third quarter of 2012, we also conducted an ethanol and reformulated ethanol-blended gasoline business through Amyris Fuels, but have, as of September 30, 2012, transitioned out of that business.

While our technology enables us to design yeast and other microorganisms to produce many different kinds of molecules, our current priority is the commercialization and production of Biofene, and its derivatives for sale in a range of specialty chemical applications within the following six identified markets: cosmetics, lubricants, flavors and fragrances, polymers and plastic additives, home and personal care products and transportation fuels.

In April 2010, we entered into a definitive agreement with Usina São Martinho to establish a joint venture entity for construction and operation of a large-scale production facility in Brazil. In March 2011, we entered into an agreement with Paraíso Bioenergia (Paraíso), under which we are designing and building a fermentation and separation plant on leased space at the Paraíso Bioenergia facility and Paraíso will supply sugar cane juice and other utilities. The manufacturing facility at Paraíso Bioenergia is our initial principal focus for production capacity. Based on our shifting manufacturing priorities and uncertainty regarding financing availability, we cannot currently predict, when or if, our facility at Usina São Martinho will be completed or commence commercial operations.

## Total Relationship

In June 2010, we entered into a collaboration agreement with Total. This agreement provided for joint collaboration on the development of products through the use of our synthetic biology platform. In connection with this agreement, Total invested \$133.2 million in our equity. At the end of the second quarter of 2010, we recorded a deferred charge asset of \$27.9 million associated with the Total investment. This deferred charge asset resulted from the difference between a third party valuation of

our stock and the price paid by Total. This deferred charge asset was to be offset against future revenue earned under arrangements with Total. As of September 30, 2012, we recognized a cumulative reduction of \$27.9 million against the deferred charge asset based on collaboration services provided by us and, the settlement of the contingently repayable advance from Total pursuant to an amendment of the collaboration agreement (as described below).

In November 2011, we entered into an amendment of the collaboration agreement with Total with respect to development and commercialization of Biofene for diesel. This represented an expansion of the initial collaboration that the parties established in 2010, and established a global, exclusive collaboration for the development of Biofene for diesel and a framework for the creation of a joint venture to manufacture and commercialize Biofene for diesel. In addition, a limited number of other potential products were subject to development for the joint venture on a non-exclusive basis.

In July 2012, we entered into a further amendment of the collaboration agreement with Total that expanded Total's investment in the Biofene collaboration, incorporated the development of certain joint venture products for use in diesel and jet fuel into the scope of the collaboration, and changed the structure of the funding from Total to include a convertible debt mechanism. Under the new agreements, we issued senior unsecured convertible notes to Total for an aggregate of \$30.0 million in new cash in the third quarter of 2012. Further funding will be triggered by Total at annual decision points in mid-2013 and 2014. Upon completion of the research and development program, we and Total would form a joint venture company that would have exclusive rights to produce and market renewable diesel and/or jet fuel. Should Total decide not to pursue commercialization, under certain conditions, it is eligible to recover up to \$105 million, payable in March 2017, in the form of cash or in the form of common stock at a conversion price of \$7.0682 per share.

# Contract Manufacturing

In 2010 and 2011, to support our initial commercial production of Biofene , we entered into contract manufacturing agreements with Biomin, Tate & Lyle and Antibióticos.

We also established contract manufacturing relationships to support conversion of Biofene into finished chemical products. For example, in January 2011, we entered into a production service agreement with Glycotech under which Glycotech performs finishing steps to convert Biofene into squalane, diesel, base oils for industrial lubricants, and other products. In addition, in July 2011, we entered into a contract manufacturing agreement with Albemarle under which Albemarle is to provide toll manufacturing services at its facility in South Carolina and we are obligated to reimburse Albemarle for capital expenditures related to facility modifications required for the services. In February 2012, we entered into an amended and restated agreement with Albemarle, which superseded the original contract manufacturing agreement with Albemarle. The term of the new agreement continues through December 31, 2019. The agreement includes certain obligations for us to pay fixed costs totaling \$7.5 million, of which \$3.5 million and \$4.0 million are payable in 2012 and 2014, respectively. In addition, fixed costs of \$2.0 million per quarter are payable in 2013 if we exercise our option to have product manufactured in the facility in 2013. The agreement also includes variable pricing during the contract term. We may seek to enter into additional contract manufacturing arrangements. We expect to work with third parties specializing in particular industries to convert Biofene by simple chemical processes and initially to sell it primarily in the forms of squalane, diesel, base oils for industrial lubricants, and other products.

Under the terms of these contract manufacturing agreements, we provided necessary equipment for the manufacturing of products, over which we retained ownership. We also reimbursed the contract manufacturers for an aggregate of \$13.8 million in expenditures related to the modification of their facilities, which we recorded as facility modification costs in other assets and amortized them as an offset against purchases of inventory. Certain of these contract manufacturing agreements also impose fixed purchase commitments on us, regardless of the production volumes.

Beginning in March 2012, we initiated a plan to shift production capacity from the contract manufacturing facilities to Amyris-owned plants that are currently under construction. As a result, we evaluated our contract manufacturing agreements and recorded a loss of \$31.2 million related to \$10.0 million in facility modification costs and \$21.2 million of fixed purchase commitments in the first quarter of 2012. We recognized an additional charge of \$1.4 million in the third quarter of 2012 associated with loss on fixed purchase commitments. We computed the loss on facility modification costs and fixed purchase commitments using the same lower of cost or market approach that is used to value inventory. The computation of the loss on firm purchase commitments is subject to several estimates, including cost to complete and the ultimate selling price of any of our products manufactured at the relevant production facilities, and is therefore inherently uncertain. We also recorded a loss on write off of production assets of \$5.5 million related to Amyris-owned production equipment at contract manufacturing facilities in the three months ended March 31, 2012. We will continue to evaluate the potential for losses in future periods based on updated production and sales price assumptions.

During the three and nine months ended September 30, 2012, we incurred \$3.0 million and \$33.2 million, respectively, of scale-up costs to support our production of farnesene-derived products that are included within cost of products sold. These scale-up costs include the contract manufacturing cost related to production of farnesene-derived products and the finishing of farnesene into finished products. We continue to commit significant resources to our production process in advance of our achieving full commercial production volume. As only a portion of our production costs varies with our revenue, our production costs will be greater than our revenue until we achieve significant product volume. We anticipate that our production costs will decrease as we continue to improve our processes and increase throughput.

## Sales

To commercialize our initial farnesene derived product, squalane, for sale to cosmetics companies for use as a moisturizing ingredient in cosmetics and other personal care products, we entered into marketing and distribution agreements with a number of distributors since June 2010. As an initial step towards commercialization of farnesene based diesel, we have entered into agreements with several bus operators in Sao Paulo, Brazil. Our diesel fuel is supplied to BR Distribudora, a division of Petrobras, which in turn blends our product with petroleum diesel and sells to a number of bus operators including Santa Brigida, the largest bus fleet operator in Sao Paulo. For the industrial lubricants market, in June 2011 we established a joint venture with Cosan for the worldwide development, production and commercialization of renewable base oils. In September 2011, for development and commercialization of isoprene for use in tires, we entered into a development agreement with Michelin.

We have also entered into agreements to sell Biofene and its derivatives directly to various potential customers, including with P&G for use in cleaning products, with M&G for use in plastics, with Kuraray for use in production of polymers, with Firmenich and Givaudan for ingredients for the flavors and fragrances market, with Method for use in home and personal care products, and with Wilmar for use as a surfactant. Production and sale of our products pursuant to any of these relationships will depend on the achievement of contract-specific technical, development and commercial milestones.

# Financing and Revenues

In the first three quarters of 2012, we have completed multiple financings involving loans and convertible debt and equity offerings. In February 2012, we completed a private placement of 10.2 million shares of common stock for total proceeds of \$58.7 million and raised \$25.0 million through convertible promissory notes. In May 2012, we completed a private placement of 1.7 million shares of common stock for an aggregate proceeds of \$4.1 million. In July 2012, we completed a sale of a convertible promissory note for cash proceeds of \$15.0 million and, in September 2012, we completed a sale of additional convertible promissory note for additional cash proceeds of \$15.0 million. We expect to need additional financing in the coming quarters, and expect that such financing will include additional offerings of securities or incurring additional debt if such financing sources become available on appropriate terms for the company and its stockholders.

Since inception through September 30, 2012, we have recognized \$386.7 million in revenue, primarily from the sale of ethanol and reformulated ethanol-blended gasoline. We transitioned out of the ethanol and ethanol-blended business during the third quarter ended September 30, 2012, which resulted in the loss of the majority of such revenues during the period. We do not expect to be able to replace much of the revenues lost in the near term as a result of this transition, particularly in 2012 and 2013 while we continue our efforts to establish a renewable products business.

# Liquidity

We expect to fund operations for the foreseeable future with cash and investments currently on hand, with cash inflows from existing collaboration and grant funding, cash contributions from product sales, and with new debt and equity financing. Our anticipated working capital needs and our planned operating and capital expenditures for the remainder of 2012 and for 2013 will require significant inflows of cash from collaboration partners, as well as funding from equity or debt offerings, credit facilities or loans, or combinations of these sources. Specifically, we will need to raise cash in the fourth quarter in order to fund our operations beyond the fourth quarter of 2012. Meeting our anticipated working capital needs and funding our strategic plans for the remainder of 2012 and for 2013 will depend on our ability to identify and secure substantial additional sources of funding beyond those we have currently identified. Furthermore, some of our anticipated financing sources are subject to risk that we cannot meet milestones, or are not yet subject to definitive agreements or funding commitments. If we fail to secure such funding in a timely manner, either in the short or long term, we may be forced to curtail our operations, which could include reductions or delays of planned capital expenditures or scaling back our operations. If we are forced to curtail our operations, we may be unable to proceed with construction of certain planned production facilities, including our planned large-scale production plants at Usina São Martinho and Paraíso Bioenergia, 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 could suffer dilution. Furthermore, the convertible notes we have issued in recent financings include various covenants, including restrictions on the amount of debt we are permitted to incur. For example, our total outstanding debt at any time can not exceed the greater of \$200.0 million or 50% of our consolidated total assets. 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 and could cause us to be at risk of defaults.

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.

As part of our operating plan for 2012, we continually look at ways to reduce our cost structure by improving efficiency in our operations and reducing non-critical expenditures. We expect these efforts to include adjustments to the timing and scope of planned capital and operating expenditures in the coming quarters.

## Critical Accounting Policies and Estimates

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

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

## **Revenue Recognition**

We currently recognize revenues from the sale of farnesene-derived products, from the delivery of collaborative research services and from government grants. Through the third quarter of 2012, we also sold ethanol and reformulated ethanol-blended gasoline under short-term agreements and in spot transactions at prevailing market prices. Revenues are recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the fee is fixed or determinable and collectibility is reasonably assured.

If sales arrangements contain multiple elements, we evaluate whether the components of each arrangement represent separate units of accounting. We have determined that all of our revenue arrangements should be accounted for as a single unit of accounting. Application of revenue recognition standards requires subjective determination and requires

management to make judgments about the fair values of each individual element and whether it is separable from other aspects of the contractual relationship.

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

Product Sales

Starting in the second quarter of 2011, we commenced sales of farnesene-derived products. Through the third quarter of 2012 we also sold ethanol and reformulated ethanol-blended gasoline under short-term agreements and in spot transactions at prevailing market prices. Revenues are recognized, net of discounts and allowances, once passage of title and risk of loss have occurred, provided all other revenue recognition criteria have also been met.

Shipping and handling costs charged to customers are recorded as revenues. Shipping costs are included in cost of products

sold. Such charges were not significant in any of the periods presented.

### Grants and Collaborative Research Services

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

Government grants are made pursuant to agreements that generally provide cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and only perfunctory obligations are outstanding. Under the DARPA contract signed in June 2012, we will receive funding based on achievement of program milestones and accordingly we will recognize revenue based on achievement of the milestones.

## Consolidations

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

### Impairment of Long-Lived Assets

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

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

value, which is determined on a discounted cash flow basis.

We make estimates and judgments about future undiscounted cash flows and fair values. Although our cash flow forecasts are based on assumptions that are consistent with our plans, there is significant exercise of judgment involved in determining the cash flow attributable to a long-lived asset over its estimated remaining useful life. Our estimates of anticipated cash flows could be reduced significantly in the future. As a result, the carrying amounts of our long-lived assets could be reduced through impairment charges in the future. We recorded losses on write off of production assets of \$5.5 million and zero during the nine months ended September 30, 2012 and 2011, respectively.

## Inventories

Inventories, which consist of farnesene-derived products, ethanol and reformulated ethanol-blended gasoline, are stated at the lower of cost or market. In the quarter ended September 30, 2012 we sold the remaining inventory of ethanol and reformulated

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

## Goodwill and Intangible Assets

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

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

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

We evaluate our intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased licenses and permits and are amortized on a straight-line basis over their estimated useful lives. Factors that could trigger an impairment review include significant under-performance relative to historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, we will reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on our reported financial results. We have not recognized any impairment charges on our intangible assets through September 30, 2012.

### Stock-Based Compensation

Stock-based compensation cost for RSUs is measured based on the closing fair market value of our common stock on the date of grant. Stock-based compensation cost for stock options and employee stock purchase plan rights is

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

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

Significant Factors, Assumptions and Methodologies Used In Determining Fair Value

We utilize the Black-Scholes option pricing model to estimate the fair value of our equity awards. The Black-Scholes option pricing model requires inputs such as the expected term of the grant, expected volatility and risk-free interest rate. Further, the

forfeiture rate also affects the amount of aggregate compensation that we are required to record as an expense. These inputs are subjective and generally require significant judgment.

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

	Three Mont	ths Ended Septem	ber Nine Mon	Nine Months Ended September		
	30,		30,			
	2012	2011	2012	2011		
Expected dividend yield	—	% —	% —	% —	%	
Risk-free interest rate	0.9	% 1.3	% 1.1	% 2.4	%	
Expected term (in years)	5.9	5.1	6.0	5.8		
Expected volatility	79	% 85	% 76	% 86	%	

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

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

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

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

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

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

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

Income Taxes

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

Recognition of deferred tax assets is appropriate when realization of such assets is more likely than not. We recognize a valuation allowance against our net deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be fully realizable. This assessment requires judgment as to the likelihood and amounts of future taxable income by tax jurisdiction. At September 30, 2012, we had a full valuation allowance against all of our deferred tax assets.

We apply the provisions of FASB's guidance on accounting for uncertainty in income taxes. We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or

challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and the tax benefit to be recognized is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

## Embedded Derivatives related to Convertible Notes

Embedded derivatives that are required to be bifurcated from the underlying debt instrument (i.e. host) are accounted for and valued as a separate financial instrument. We evaluated the terms and features of our convertible notes payable and identified a compound embedded derivative (a conversion option that contains a "make-whole interest" provision) requiring bifurcation and accounting at fair value because the economic and contractual characteristics of the embedded derivative met the criteria for bifurcation and separate accounting due to the conversion option containing a "make-whole interest" provision, that requires cash payment for forgone interest upon a change of control. We estimate the fair value of the compound embedded derivative using a Black-Scholes valuation model that combines expected cash outflows with market-based assumptions regarding risk-adjusted yields, stock price volatility, probability of a change of control and the trading information of our common stock into which the notes are convertible. The change in the fair value of the bifurcated compound derivative is primarily related to the change in price of the underlying common stock and is reflected in our consolidated statements of operations as "other income (expense)".

## **Results of Operations**

The following table sets forth our condensed consolidated statement of operations data for the periods shown (in thousands except share and per share amounts):

	Three Months Ended September 30,			er Nine Months Ended September 30,				
	2012		2011		2012		2011	
		ls.	Except share a	nd		noi		
Consolidated Statement of Operations Data:	(	,	F				)	
Revenues								
Product sales	\$4,728		\$31,162		\$46,615		\$92,998	
Grants and collaborations revenue	14,380		5,114		21,225		12,454	
Total revenues	19,108		36,276		67,840		105,452	
Costs and operating expenses								
Cost of products sold	4,444		35,729		71,891		99,247	
Loss on purchase commitments and write off of production assets	1,438		_		38,090		_	
Research and development <sup>(1)</sup>	15,736		23,441		55,580		66,622	
Sales, general and administrative <sup>(1)</sup>	17,355		21,174		61,301		59,401	
Total costs and operating expenses	38,973		80,344		226,862		225,270	
Loss from operations	(19,865	)	(44,068	)	(159,022	)	(119,818	)
Other income (expense):			× ,		× ,		× ,	,
Interest income	297		609		1,406		1,250	
Interest expense	(1,224	)	(291	)	(3,538	)	(1,172	)
Other income (expense), net	664		310		(512	)	160	
Total other income (expense)	(263	)	628		(2,644	)	238	
Loss before income taxes	(20,128	)	(43,440	)	(161,666	)	(119,580	)
Provision for income taxes	(260	)	(474	)	(753	)	(299	)
Net loss	\$(20,388	)	\$(43,914	)	\$(162,419	)	\$(119,879	)
Net loss attributable to noncontrolling interest	95		224		772		437	
Net loss attributable to Amyris, Inc. common stockholders	\$(20,293	)	\$(43,690	)	\$(161,647	)	\$(119,442	)
Net loss per share attributable to common stockholders, basic and diluted	\$(0.34	)	\$(0.97	)	\$(2.91	)	\$(2.68	)
Weighted-average shares of common stock outstanding used in computing net loss per share of common stock, basic and diluted	58,964,226		45,031,613		55,552,949		44,507,686	

<sup>(1)</sup> Includes stock-based compensation expense.

## Comparison of Three Months Ended September 30, 2012 and 2011

Revenues

	Three Months Ended Septembe 30, 2012 2011 (Dollars in thousands)		r Year-to-Year Percentag Change Change			
Revenues Product sales	\$4,728	\$31,162	\$(26,434	) (85	)%	
Grants and collaborations revenue Total revenues	14,380 \$19,108	\$31,102 5,114 \$36,276	\$(20,454 9,266 \$(17,168	181	)//c % )%	
10tal levellues	$\phi$ 19,100	φ <i>3</i> 0,270	$\varphi(17,100)$	) (+/	) /0	

Our total revenues decreased by \$17.2 million to \$19.1 million from \$36.3 million in the same period of 2011, with such decrease primarily resulting from decreases in product sales. Revenue from product sales decreased by \$26.4 million to \$4.7 million primarily from lower sales of ethanol and reformulated ethanol-blended gasoline purchased from third parties, with a decrease in gallons sold and a decrease in average selling price per gallon compared to 2011. We sold 0.2 million gallons of ethanol and 0.4 million gallons of reformulated ethanol-blended gasoline compared to 2.1 million gallons of ethanol and 8.5 million gallons of reformulated ethanol-blended gasoline sales in the prior year. Product sales of farnesene-derived products in the three months ended September 30, 2012 increased \$3.0 million over the same period of prior year primarily due to sales of squalane and diesel fuels. Grants and collaborations revenue increased by \$9.3 million over the same prior year period primarily due to the revenue recognized under our amended collaboration agreement with Total, which resulted in the recognition of approximately \$9.8 million in collaboration revenue, partially offset by a decline in other grants and collaborations revenue of \$0.5 million.

Nearly all of our revenues to date have come from the sale of ethanol and reformulated ethanol-blended gasoline with the remainder coming from renewable products as well as from collaborations and government grants. We transitioned out of the ethanol and ethanol-blended gasoline business during the third quarter ended September 30, 2012, which resulted in the loss of the majority of such revenues during the period. We do not expect to be able to replace much of the revenue lost in the near term as a result of this transition, particularly in 2012 and 2013 while we continue our efforts to establish a renewable products business.

## Costs and Operating Expenses

	Three Months Ended September 30,		Year-to-Year Change		U	
	2012	2012 2011		Change		
	(Dollars in the	ousands)				
Cost of products sold	\$4,444	\$35,729	\$(31,285	) (88	)%	
Loss on purchase commitments and write off of production assets	1,438	_	1,438	_	%	
Research and development	15,736	23,441	(7,705	) (33	)%	
Sales, general and administrative	17,355	21,174	(3,819	(18	)%	
Total costs and operating expenses	\$38,973	\$80,344	\$(41,371	) (51	)%	

## Cost of Products Sold

Our cost of products sold decreased by \$31.3 million to \$4.4 million compared to the prior year. We had a decrease of \$29.9 million in costs of ethanol and reformulated ethanol-blended gasoline purchased from third parties primarily

due to a decrease in product volume. Production cost of farnesene-derived products remained the same at approximately \$3.0 million compared to the same period of the prior year. The cost of farnesene-derived products included charges related to the write down of inventory resulting from applying the lower-of-cost-or-market inventory rules.

We transitioned out of our ethanol and gasoline business in the quarter ended September 30, 2012, which resulted in a reduction of cost of products sold. We plan to make significant capital expenditures in connection with the construction of our large-scale production plant, and expect to continue to incur costs in connection with our contract manufacturing arrangements.

We expect cost of products sold associated with farnesene-derived products to decline if and when we achieve full-scale commercial production at our large-scale manufacturing facility. We are not able to predict when or if this will occur.

## Cost of Products Sold Associated with Loss on Purchase Commitments

Beginning in March 2012, we initiated a plan to shift a portion of our production capacity from contract manufacturing facilities to Amyris-owned plants that are currently under construction. We recognized an additional charge of \$1.4 million in the third quarter of 2012 associated with loss on fixed purchase commitments. We computed the loss on fixed purchase commitments using the same approach that is used to value inventory-the lower of cost or market value. The computation of the loss on firm purchase commitments is subject to several estimates, including the ultimate selling price of any of our products manufactured at the relevant production facilities, and is therefore inherently uncertain. In addition, many of our contract manufacturing agreements contain terms that commit us to pay for 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.

#### Research and Development Expenses

Our research and development expenses decreased by \$7.7 million in the third quarter of 2012 compared to the same period of the prior year, primarily the result of a \$4.2 million decrease in outside consulting expenses and a \$1.6 million decrease in personnel-related expenses associated with lower headcount and corresponding lower stock-based compensation. Research and development expenses included stock-based compensation expense of \$1.5 million in 2012 compared to \$1.7 million in 2011.

#### Sales, General and Administrative Expenses

Our sales, general and administrative expenses decreased by \$3.8 million in the third quarter of 2012 compared to the same period of the prior year, primarily the result of a \$2.5 million decrease in personnel-related expenses and corresponding lower stock-based compensation associated with a change in headcount, \$0.8 million decrease in professional services fees, and \$0.4 million decrease in marketing expenses. Sales, general and administrative expenses included stock-based compensation expense of \$4.5 million and \$5.2 million during the third quarter of 2012 and 2011, respectively.

#### Other Income (Expense)

	Three Months Ended September 30, 2012 2011 (Dollars in thousands)		Year-to-Year Change	Percentage Change	
	(Donars in tho	isanus)			
Other income (expense):					
Interest income	\$297	\$609	\$(312	) (51))%	
Interest expense	(1,224	) (291 )	(933	321 %	
Other income, net	664	310	354	114 %	
Total other income (expense)	\$(263	) \$628	\$(891	(142)%	

Total other expense increased by approximately \$0.9 million to \$0.3 million in 2012 compared to the prior year. The increase in total other expense was related primarily to higher interest expense of \$0.9 million associated with increased debt balances and lower interest income of \$0.3 million, partially offset by higher other income, net in the 2012 period of approximately \$0.4 million primarily related to the change in the fair value of the derivative liability associated with our amended collaboration agreement with Total. We expect interest expense to be greater in 2012 than in 2011 due to increased amounts of debt incurred to fund our operations, including capital expenditures for the coming year. We also may experience exposure to fluctuations in other expense, net in future periods related to changes in the market value of our currency interest rate swap agreement and changes in the fair value of our derivate

liability associated with our amended collaboration agreement with Total.

Comparison of Nine Months Ended September 30, 2012 and 2011

# Revenues

	Nine Months Ended September 30,		Year-to-Year		ge
	2012	2011	Change	Change	
	(Dollars in th	ousands)			
Revenues					
Product sales	\$46,615	\$92,998	\$(46,383)	(50	)%
Grants and collaborations revenue	21,225	12,454	8,771	70	%
Total revenues	\$67,840	\$105,452	\$(37,612)	(36	)%
<b>5</b> 0					
58					

Our total revenues decreased by \$37.6 million to \$67.8 million with such decrease primarily resulting from decreases in product sales. Revenue from product sales decreased by \$46.4 million to \$46.6 million primarily from lower sales of ethanol and reformulated ethanol-blended gasoline purchased from third parties, with a decrease in gallons sold and a decrease in average selling price per gallon. We sold 2.3 million gallons of ethanol and 11.2 million gallons of reformulated ethanol-blended gasoline in the nine months ended September 30, 2012 compared to 8.5 million gallons of ethanol and 24.4 million gallons of reformulated ethanol-blended products increased \$7.7 million in the nine months ended September 30, 2012 compared to the same period in prior year. Grants and collaborations revenue increased by \$8.8 million over the same prior year period primarily due to the revenue recognized under our amended collaboration agreement with Total which resulted in the recognition of approximately \$9.8 million in collaboration revenue, partially offset by a decline in other collaboration revenue of \$1.0 million.

## Costs and Operating Expenses

	Nine Months Ended September		Year-to-Year	Percentag	Te
	30		Change	Change	ge
	2012			Change	
	(Dollars in thous	sands)			
Cost of products sold	\$71,891	\$99,247	\$(27,356)	(28	)%
Loss on purchase commitments and write off of	38,090		38,090	nm	
production assets	50,070		50,070	11111	
Research and development	55,580	66,622	(11,042)	(17	)%
Sales, general and administrative	61,301	59,401	1,900	3	%
Total costs and operating expenses	\$226,862	\$225,270	\$1,592	1	%

#### nm= not meaningful

## Cost of Products Sold

Our cost of products sold decreased by \$27.4 million to \$71.9 million in the nine months ended September 30, 2012 compared to the same period the prior year. We had a decrease of \$54.4 million in costs of ethanol and reformulated ethanol-blended gasoline purchased from third parties primarily due to a decline in product volume and a decrease in average unit cost. This decrease in cost of product sold for ethanol and reformulated ethanol-blended gasoline was partially offset by an increase in production costs of farnesene-derived products of \$27.1 million in the nine months ended September 30, 2012 compared to the prior year as we scale up our renewable operations. The cost of farnesene-derived products included charges related to the write down of inventory resulting from applying the lower-of-cost-or-market inventory rules.

We expect cost of products sold associated with farnesene-derived products to decline if and when we achieve full-scale commercial production at our large-scale manufacturing facility. We are not able to predict when or if this will occur.

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

Beginning in March 2012, we initiated a plan to shift production capacity from contract manufacturing facilities to Amyris-owned plants that are currently under construction. As a result, we evaluated our contract manufacturing agreements and, in the first quarter of 2012, recorded a loss of \$31.2 million related to facility modification costs and fixed purchase commitments. We recognized an additional charge of \$1.4 million in the third quarter of 2012

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

Further impairment of such assets may occur in future quarters as we continue to evaluate and adjust our priorities for production, including the levels of utilization of our current and planned manufacturing facilities, which would cause us to incur additional future losses associated with such facilities. In addition, many of our contract manufacturing agreements contain terms that commit us to pay for 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.

#### Research and Development Expenses

Our research and development expenses decreased by \$11.0 million, primarily the result of an \$8.8 million decrease in outside consulting expenses and a \$1.1 million decrease in personnel-related expenses associated with lower headcount and corresponding lower stock-based compensation. Research and development expenses included stock-based compensation expense of \$4.5 million in nine months ended September 30, 2012 compared to \$4.7 million in 2011.

#### Sales, General and Administrative Expenses

Our sales, general and administrative expenses increased by \$1.9 million, primarily as a result of increased personnel-related expenses of \$3.8 million associated with severance and transition costs and higher stock-based compensation, higher overhead costs of \$1.9 million associated with increased headcount offset by a \$1.7 million decrease in marketing expenses, a \$1.2 million in decrease in professional service fees, and \$1.2 million decrease in other sales, general and administrative expenses. Sales, general and administrative expenses included stock-based compensation expense of \$16.9 million and \$14.1 million during the nine months ended September 30, 2012 and 2011, respectively.

#### Other Income (Expense)

	Nine Months 30, 2012 (Dollars in th	Ended September 2011 ousands)	Year-to-Year Change	Percentage Change
Other income (expense):	× ·	,		
Interest income	\$1,406	\$1,250	\$156	12 %
Interest expense	(3,538	) (1,172 )	(2,366)	202 %
Other income (expense), net	(512	) 160	(672)	(420)%
Total other income (expense)	\$(2,644	) \$238	\$(2,882)	(1,211)%

Total other expense increased by approximately \$2.9 million to \$2.6 million primarily due to higher interest expense of \$2.4 million associated with increased debt balances and an increase in other expense, net of approximately \$0.7 million primarily related to the change in fair value of our currency interest rate swap arrangement and the change in fair value of our derivative liability offset by an increase in interest income of \$0.2 million. We expect interest expense to be greater in 2012 than in 2011 due to increased amounts of debt incurred to fund our operations, including capital expenditures for the coming year. We also may experience exposure to fluctuations in other expense, net in future periods related to changes in the market value of our currency interest rate swap agreement and changes in fair value of our derivative liability

#### Liquidity and Capital Resources

	September 30,	December 31,
	2012	2011
	(Dollars in thous	ands)
Working capital	\$18,583	\$47,205
Cash and cash equivalents and short-term investments	\$44,429	\$103,592
Debt and capital lease obligations	\$108,776	\$47,660

Accumulated deficit	\$(542,835	) \$(381,188 )	)
	Nine Months	Ended September 30,	
	2012	2011	
	(Dollars in the	ousands)	
Net cash used in operating activities	\$(119,693	) \$(65,768 )	)
Net cash provided by (used in) investing activities	\$(43,651	) \$23,636	
Net cash provided by financing activities	\$113,788	\$6,041	

Working Capital. Working capital was \$18.6 million at September 30, 2012, a decrease of \$28.6 million from working capital

as of December 31, 2011. This decrease was principally attributable to a reduction in net cash and investment balances of \$59.2 million due primarily to investment in large scale production plants, and a decline of \$9.9 million in other current assets largely related to the write off of facility modification costs at one of our contract manufacturing facilities. This decrease was offset in part by a reduction of \$25.9 million in short term debt balances and a reduction of \$14.9 million in accounts payable and accrued and other current liabilities.

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

The timing and amount of capital expenditures for additional production facilities, at least in the near term will depend on our ability to access external sources of financing as well as our business and financial outlook. For example, we believe that the amount of financing that we agree to provide for the construction of bolt-on, or other, production facilities may influence the other terms of the arrangements that we establish with the facility owner, and, accordingly, expect to evaluate the optimal amount of capital expenditures that we agree to fund on a case-by-case basis. We may also consider additional strategic investments or acquisitions. These events may require us to access additional capital through equity or debt offerings. If we are unable to access additional capital, our growth may be limited due to the inability to invest in additional production facilities.

We believe that in order to fund our operations and other capital expenditures for the next twelve months we will be required to raise additional funds, in addition to our existing cash, cash equivalents and short-term investments at September 30, 2012, cash inflows from existing collaboration, grants and product sales, and reductions in cash outflows as a result of planned actions.

Our anticipated working capital needs and our planned operating and capital expenditures for the remainder of 2012 and for 2013 will require significant inflows of cash from collaboration partners, as well as funding from equity or debt offerings, credit facilities or loans, or combinations of these sources. Specifically, we will need to raise cash in the fourth quarter in order to fund our operations beyond the fourth quarter of 2012. Meeting our anticipated working capital needs and funding our strategic plans for the remainder of 2012 and for 2013 will depend on our ability to identify and secure substantial additional sources of funding beyond those we have currently identified. Furthermore, some of our anticipated financing sources are subject to risk that we cannot meet milestones, or are not yet subject to definitive agreements or funding commitments. If we fail to secure such funding in a timely manner, either in the short or long term, we may be forced to curtail our operations, which could include reductions or delays of planned capital expenditures or scaling back our operations. If we are forced to curtail our operations, we may be unable to proceed with construction and commissioning of our planned large-scale production facilities at Usina São Martinho and Paraíso Bioenergia , 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. Furthermore, the convertible notes we have issued in recent financings include various covenants, including restrictions on the amount of debt we are permitted to incur. For example our total outstanding debt at any time cannot exceed the greater of \$200.0 million or 50% of our consolidated total assets. 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 and could cause us to be at risk of defaults. For example, in February 2012, we completed the convertible note financing described below. 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 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 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 and could cause us to be at risk of defaults.

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.

Beginning in March 2012, we initiated a plan to shift a portion of our production capacity from contract manufacturing facility to our Amyris-owned plant that is currently under construction. As a result, we evaluated our contract manufacturing agreements and recorded a loss of \$31.2 million related to the write-off of \$10.0 million in facility modification costs and the

recognition of \$21.2 million of fixed purchase commitments in the three months ended, March 31, 2012. We recognized an additional charge of \$1.4 million in the third quarter of 2012 associated with loss on fixed purchase commitments. We computed the loss on facility modification costs and fixed purchase commitments using the same lower of cost or market approach that is used to value inventory. The computation of the loss on firm purchase commitments is subject to several estimates, including cost to complete and the ultimate selling price of any of our products manufactured at the relevant production facilities, and is therefore inherently uncertain. We also recorded a loss on write off of production assets of \$5.5 million related to Amyris-owned production equipment at contract manufacturing facilities in the quarter ended March 31, 2012.

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

In July and September of 2012, we issued convertible notes to Total for an aggregate of \$30.0 million in cash proceeds as described in more detail under "Overview - Total Relationship" above.

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

In May 2012, we completed a private placement of 1.7 million shares of our common stock for aggregate proceeds of \$4.1 million.

Banco Pine Loans. In December 2011, we received a loan of R\$35.0 million (approximately US\$17.2 million based on the exchange rate as of September 30, 2012) from Banco Pine. Such loan was an advance on anticipated 2012 financing from Nossa Caixa, the Sao Paulo State development bank, and Banco Pine, under which Banco Pine and Nossa Caixa would provide us with loans of up to approximately R\$52.0 million (approximately US\$25.6 million based on the exchange rate at September 30, 2012) as financing for capital expenditures relating to our manufacturing facility at Paraíso Bioenergia. The maturity date for this loan was originally February 17, 2012; however, in February 2012, we entered into a supplemental agreement with Banco Pine under which the parties agreed to extend the maturity date for the repayment of the original loan from February 17, 2012 to May 17, 2012, and in May 2012, we entered into an additional supplemental extending the maturity date to August 15, 2012. This loan was repaid in July 2012.

In June 2012, we entered into a separate loan agreement with Banco Pine under which Banco Pine provided a bridge Loan of R\$52.0 million reais (approximately US\$25.6 million based on the exchange rate as of September 30, 2012). The Bridge Loan was an additional advance on the anticipated Banco Pine and Nossa Caixa financing described above. The interest rate for the Bridge Loan is 0.4472% monthly (approximately 5.5% on an annualized basis). The principal and interest of this bridge loan matured and were required to be repaid on September 19, 2012, subject to extension by Banco Pine. This bridge loan was repaid in July 2012.

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

Banco Pine/Nossa Caixa Financing. In July 2012, we entered into a Note of Bank Credit and a Fiduciary Conveyance of Movable Goods agreement with each of Nossa Caixa and Banco Pine. Under such instruments, we borrowed an aggregate of R\$52.0 million (approximately US\$25.6 million based on the exchange rate as of September 30, 2012) as financing for capital expenditures relating to our manufacturing facility at Paraíso Bioenergia. Under the loan agreements, Banco Pine agreed to lend R\$22.0 million and Nossa Caixa agreed to lend R\$30.0 million. The funds for these loans are provided by BNDES, but are guaranteed by the lenders. The loans have a final maturity date of July 15, 2022 and bear a fixed interest rate of 5.5% per year. The loans are secured by certain of our farnesene production system at the Paraíso Bioenergia manufacturing facility, and we were required to provide parent guarantees to each of the lenders.

BNDES Credit Facility. In December 2011, we entered into a credit facility in the amount of R\$22.4 million (approximately

US\$11.0 million based on the exchange rate as of September 30, 2012) with Banco Nacional de Desenvolvimento Econômico e Social, or BNDES, a government owned bank headquartered in Brazil. This BNDES facility was extended as project financing for a production site in Brazil. The credit line is divided into an initial tranche for up to approximately R\$19.1 million and an additional tranche of approximately R\$3.3 million reais that becomes available upon delivery of additional guarantees. The credit line is available for 12 months from the date of the Credit Agreement, subject to extension by the lender.

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

The credit facility is collateralized by first priority security interest in certain of certain of our equipment and other tangible assets with an original purchase price of R\$24.9 million reais. We are a parent guarantor for the payment of the outstanding balance under the BNDES credit facility. Additionally, we are required to provide a bank guarantee equal to 10% of the total approved amount (R\$22.4 million reais in total debt) available under the credit facility. For advances in the second tranche (above R\$19.1 million), we are required to provide additional bank guarantees equal to 90% of each such advance, plus additional Amyris guarantees equal to at least 130% of such advance. The credit agreement contains customary events of default, including payment failures, failure to satisfy other obligations under the Credit Agreement or related documents, defaults in respect of other indebtedness, bankruptcy, insolvency and inability to pay debts when due, material judgments, and changes in control of Amyris Brasil. If any event of default under the credit agreement occurs, the lender may terminate its commitments and declare immediately due all borrowings under the facility. As of September 30, 2012 we had R\$19.1 million (approximately US\$9.4 million based on the exchange rate as of September 30, 2012) in outstanding advances under the BNDES Credit Facility.

FINEP Credit Facility. In November 2010, we entered into a credit facility with Financiadora de Estudos e Projetos, or FINEP, a state-owned company subordinated to the Brazilian Ministry of Science and Technology. This FINEP Credit Facility was extended to partially fund expenses related to our research and development project on sugarcane-based biodiesel, or the FINEP Project, and provides for loans of up to an aggregate principal amount of R\$6.4 million (approximately US\$3.2 million based on the exchange rate at September 30, 2012) which is guaranteed by a chattel mortgage on certain of our equipment as well as bank letters of guarantee. The first disbursement of approximately R\$1.8 million reais was received on February 11, 2011 and the next three disbursements will each be approximately R\$1.6 million reais. Subject to compliance with certain terms and conditions under the FINEP Credit Facility, the three remaining disbursements of the loan would become available to us for withdrawal.

Interest on loans drawn under this credit facility is fixed at 5.0% per annum. In case of default under or non-compliance with the terms of the agreement the interest on loans will be dependent on the long-term interest rate as published by the Central Bank of Brazil, or TJLP. If the TJLP at the time of default is greater than 6%, then the interest will be 5.0% + a TJLP adjustment factor otherwise the interest will be at 11.0% per annum. In addition, a fine of up to 10.0% will apply to the amount of any obligation in default. Interest on late balances will be 1.0% interest per month, levied on the overdue amount. Payment of the outstanding loan balance will be made in 81 monthly installments which will commence in July 2012 and extend through March 2019. Interest on loans drawn and other charges are paid on a monthly basis commencing in March 2011. As of September 30, 2012 and December 31, 2011 there were R\$1.8 million (approximately US\$0.9 million based on the exchange rate at September 30, 2012) outstanding under this FINEP Credit Facility.

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

We will share with FINEP the costs associated with the FINEP Project. At a minimum, we will contribute approximately R\$14.5 million reais (US\$7.1 million based on the exchange rate at September 30, 2012) of which R\$11.1 million to be contributed prior to the release of the second disbursement, which is expected to occur in 2013; After the release of the first disbursement, prior to any subsequent drawdown from the FINEP Credit Facility, we are required to provide letters of guarantee of up to R\$3.3 million in aggregate (approximately US\$1.6 million based on the exchange rate at September 30, 2012);

Amounts released from the FINEP Credit Facility must be completely used by us towards the FINEP Project within 30 months after the contract execution.

Revolving Credit Facility. In December 2010, we established a revolving credit facility with a financial institution that provided for loans and standby letters of credit of up to an aggregate principal amount of \$10.0 million, with a sublimit of \$5.0 million on standby letters of credit. Interest on loans drawn under this revolving credit facility was equal to (i) the Eurodollar Rate plus 3.0%; or (ii) the Prime Rate plus 0.5%. In case of default or non-compliance with the terms of the agreement, the interest on

loans was Prime Rate plus 2.0%. The credit facility was collateralized by a first priority security interest in certain of our present and future assets. In April 2012, we paid \$7.7 million of outstanding loans under this credit facility (see Note 6). In May 2012, we entered into a letter agreement with the bank amending the credit facility agreement to reduce the committed amount under the credit facility from \$10.0 million to approximately \$2.3 million, and the letters of credit sublimit from \$5.0 million to approximately \$2.3 million. The amendment also modified the current ratio covenant to require a ratio of current assets to current liabilities of at least 1.3:1 (as compared to 2:1 in the credit facility), and required us to maintain unrestricted cash of at least \$15.0 million in its account with the bank. In June 2012, the credit facility was terminated and, as of September 30, 2012, no loans or letters of credit were outstanding.

Amyris Fuels Credit Agreement. We had an uncommitted facility letter with a financial institution to finance the purchase and sale of fuel and for working capital requirements, as needed. We were a parent guarantor for the payment of the outstanding balance under the credit agreement. The agreement was collateralized by a first priority security interest in certain of our present and future assets. The agreement was terminated as of June 30, 2012 and, as of September 30, 2012, we had zero in outstanding letters of credit under the Credit Agreement.

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

Government Contracts. In 2010, we were awarded a \$24.3 million "Integrated Bio-Refinery" grant from the U.S. Department of Energy, or DOE. Under this grant, we are required to fund an additional \$10.6 million in cost sharing expenses. According to the terms of the DOE grant, we were required to maintain a cash balance of \$8.7 million, calculated as a percentage of the total project costs, to cover potential contingencies and cost overruns. As of September 30, 2012, cash requirement is approximately US\$1.0 million. These funds are not legally restricted but they must be available and unrestricted during the term of the project. Our obligation for this cost share is contingent on reimbursement for project costs incurred. Through September 30, 2012, we recognized \$22.1 million in revenue under this grant, of which \$4.5 million was received during the nine months ended September 30, 2012.

In August 2010, we were appointed as a subcontractor to National Renewable Energy Laboratory, or NREL, under a DOE grant awarded to NREL. We have the right to be reimbursed for up to \$3.9 million, and are required to fund an additional \$1.5 million, in cost sharing expenses. Through September 30, 2012, we had recognized \$1.1 million in revenue under this grant, of which \$665,000 was received during the nine months ended September 30, 2012.

In June 2012, we entered into a Technology Investment Agreement with The Defense Advanced Research Projects Agency (DARPA), under which we will perform certain research and development activities funded in part by DARPA. The work is to be performed on a cost-share basis, where DARPA funds 90% of the work and we fund the remaining 10% (primarily by providing specified labor). Under the agreement, we could receive funding of up to approximately \$8.0 million over two years based on achievement of program milestones, and, accordingly, would be responsible for contributions equivalent to approximately \$900,000. The agreement has an initial term of one year and, at DARPA's option, may be renewed for an additional year. Either party may terminate the agreement upon a reasonable determination that the program will not produce beneficial results commensurate with the expenditure of resources, subject to certain consultation obligations. We cannot be sure that we will receive the amount of funding available under the agreement. For example, we may not be able to meet the project milestones on a timely basis or at all. In addition, DARPA may determine that the project is not producing beneficial results commensurate with the expense, and seek to terminate the agreement. Furthermore, like the DOE grant, the DARPA contract requires us to implement certain governance and other processes, and DARPA may audit us and terminate the agreement if it determines we have failed to comply with such requirements.

Cash Flows during the Nine Months Ended September 30, 2012 and 2011

Cash Flows from Operating Activities

Our primary uses of cash from operating activities are cost of products sold and personnel-related expenditures offset by cash received from product sales. Cash used in operating activities was \$119.7 million and \$65.8 million for the nine months ended September 30, 2012 and 2011, respectively.

Net cash used in operating activities of \$119.7 million for the nine months ended September 30, 2012 reflected a net loss of \$162.4 million and a \$28.7 million net change in our operating assets and liabilities partially offset by non-cash charges of \$71.4 million. The net change in operating assets and liabilities of \$28.7 million primarily consisted of an \$11.2 million decrease

in accounts payable, a \$29.4 million decrease in accrued and other long term liabilities, a \$1.3 million decrease in deferred revenue and a \$0.9 million decrease in deferred rent partially offset by a \$10.7 million decrease in prepaid expenses and other assets and a \$2.9 million decrease in accounts receivable. Non-cash charges of \$71.4 million were primarily related to \$38.1 million of losses from firm purchase commitments and write off of production assets at contract manufacturers, \$21.4 million of stock-based compensation, and \$10.7 million of depreciation and amortization expenses.

Net cash used in operating activities of \$65.8 million in the nine months ended September 30, 2011 reflected a net loss of \$119.9 million partially offset by non-cash charges of \$27.1 million and a \$27.0 million net change in our operating assets and liabilities. Non-cash charges primarily included \$18.8 million of stock-based compensation and \$7.7 million of depreciation and amortization. Net change in operating assets and liabilities of \$27.0 million primarily consists of a \$17.7 million increase in accrued and other long term liabilities, an \$11.0 million increase in accounts payable and a \$4.6 million increase in deferred revenue partially offset by a \$4.6 million increase in inventory and a \$1.1 million increase in prepaid expenses and other assets.

## Cash Flows from Investing Activities

Our investing activities consist primarily of capital expenditures, net investment purchases, maturities and sales.

For the nine months ended September 30, 2012, cash used in investing activities was \$43.7 million as a result of \$50.9 million of capital expenditures and deposits on property and equipment, offset by net sales of short term investments of \$8.2 million.

For the nine months ended September 30, 2011, cash provided by investing activities was \$23.6 million as a result of \$94.5 million in net investment maturities and \$0.3 million in acquisition of cash in noncontrolling interest offset by \$71.2 million of capital expenditures and deposits on property and equipment.

## Cash Flows from Financing Activities

For the nine months ended September 30, 2012, cash provided by financing activities was \$113.8 million, primarily the result of \$105.6 million in debt financing and the receipt of \$62.5 million in proceeds from sales of common stock in private placements, net of issuance costs. These cash inflows were offset in part by principal payments on debt of \$52.1 million and principal payments on capital leases of \$3.0 million.

For the nine months ended September 30, 2011, cash provided by financing activities was \$6.0 million, primarily the result of \$7.6 million from debt financing and the receipt of \$5.0 million in proceeds from option exercises. These cash receipts were offset in part by principal payments on debt of \$4.0 million and principal payments on capital leases of \$2.1 million

## **Off-Balance Sheet Arrangements**

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

## **Contractual Obligations**

The following is a summary of our contractual obligations as of September 30, 2012 (in thousands):

	Total	2012 (Three Months)	2013	2014	2015	2016	Thereafter
Principal payments on long-term debt	\$116,119	\$156	\$2,449	\$3,620	\$5,515	\$5,546	\$98,833
Interest payments on short- and long-term debt, fixed rate <sup>(1)</sup>	15,399	1,232	2,922	2,487	1,880	1,619	5,259
Operating leases	39,517	1,690	6,551	6,681	6,809	6,795	10,991
Principal payments on capital leases	3,366	756	1,366	957	287	—	
Interest payments on capital leases	235	60	123	50	2		
Terminal storage costs	142	53	89	—	—	—	—
Purchase obligations <sup>(2)</sup>	55,272	10,034	13,268	13,880	9,855	8,235	
Total	\$230,050	\$13,981	\$26,768	\$27,675	\$24,348	\$22,195	\$115,083

(1) The interest rates are more fully described in Note 6 of our consolidated financial statements.

Purchase obligations include non-cancelable contractual obligations and construction commitments of \$54.2 (2) million of which \$14.2 million

million, of which \$14.3 million have been accrued as loss on purchase commitments.

This table does not reflect non-reimburseable expenses that we expect to incur in 2012 in connection with research activities under the DOE Integrated Bio-Refinery grant and the NREL subcontract discussed above under the caption "Liquidity and Capital Resources - Government Contracts." We have the right to be reimbursed for up to \$24.3 million of a total of up to \$34.9 million of expenses for research activities that we undertake under the DOE Integrated Bio-Refinery grant. We have the right to be reimbursed for up to \$3.9 million of a total of \$5.4 million of expenses for research activities that we undertake under the NREL grant.

Additionally, this table does not reflect the expenses that we expect to incur in 2012 and 2013 in connection with research activities under DARPA under which we will perform certain research and development activities funded in part by DARPA. The work is to be performed on a cost-share basis, where DARPA funds 90% of the work and we fund the remaining 10% (primarily by providing specified labor). Under the agreement, we could receive funding of up to approximately \$8.0 million over two years based on achievement of program milestones, and, accordingly, we would be responsible for contributions equivalent to approximately \$900,000.

## **Recent Accounting Pronouncements**

The information contained in Note 2 to the Unaudited Condensed Consolidated Financial Statements under the heading recent accounting pronouncements is hereby incorporated by reference into this Part I, Item 2.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, primarily changes in interest rates, currency exchange rates and commodity prices. On a limited basis, we use derivative financial instruments primarily to manage commodity price risk.

## Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and our outstanding debt obligations. We generally invest our cash in investments with short maturities or with frequent interest reset terms. Accordingly, our interest income fluctuates with short-term market conditions. As of September 30, 2012, our investment portfolio consisted primarily of money market funds and certificates of deposit, all of which are highly liquid investments. Due to the short-term nature of our investment portfolio, our exposure to interest rate risk is minimal. Additionally, as of September 30, 2012, 100% of our outstanding debt is in fixed rate instruments.

Foreign Currency Risk

Certain of our sales contracts are denominated in foreign currencies and, therefore, our revenues are subject to foreign currency risks. In addition, we do incur certain of our production costs, primarily sugar feedstocks and manufacturing service fees, operating expenses and capital expenditures in currencies other than the U.S. dollar and, therefore, are subject to volatility in cash flows due to fluctuations in foreign currency exchange rates, particularly changes in the Brazilian reais. As of September 30, 2012 we have entered into a currency interest rate swap arrangement with Banco Pine for R\$22.0 million (approximately US\$10.8 million based on the exchange rate of September 30, 2012). The swap arrangement exchanges the principal and interest payments under the bridge loan for alternative principal and interest payments that are subject to adjustment based on fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real. The swap has a fixed interest rate of 3.94%. This arrangement hedges the fluctuations in the foreign exchange rate between the U.S. dollar and Brazilian real.

## Commodity Price Risk

Our exposure to market risk for changes in commodity prices currently relates to our purchases of sugar feedstocks and through the third quarter of 2012, were also related to our purchases of ethanol and reformulated ethanol-blended gasoline. When possible, we manage our exposure to this risk primarily through the use of supplier pricing agreements. Through the third quarter of 2012, we also used standard derivative commodity instruments to hedge the price volatility of ethanol and reformulated ethanol-blended gasoline, principally through futures contracts but have, as of September 30, 2012, transitioned out of that business and no longer purchase any ethanol and reformulated ethanol-blended gasoline or use standard derivative commodity instruments.

The changes in fair value of these contracts are recorded on the balance sheet and recognized immediately in cost of products sold. We recognized a loss of \$288,000 and \$2.1 million as the change in fair value for the nine months ended September 30, 2012 and 2011, respectively (see Note 3 to our Consolidated Financial Statements).

# ITEM 4. CONTROLS AND PROCEDURES

#### **Disclosure Controls and Procedures**

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Exchange Act of 1934, as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our chief executive officer ("CEO") and chief financial officer ("CFO") concluded that, as of September 30, 2012, our disclosure controls and procedures are designed and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during our third fiscal quarter ended September 30, 2012 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II

#### ITEM 1. LEGAL PROCEEDINGS

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

#### ITEM 1A. RISK FACTORS

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

#### Risks Related to Our Business

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

As of September 30, 2012, we had an accumulated deficit of \$542.8 million. We expect to incur additional costs and expenses related to the continued development and expansion of our business, including construction and operation of our manufacturing facilities, our research and development operations, continued operation of our pilot plants and demonstration facility, and engineering and design work. Further, we expect to incur costs related to contract manufacturing arrangements. 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.

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 various contract manufacturing facilities. For longer term and more cost-effective production capacity, we are planning to shift most of our production capacity away from these contract manufacturing facilities and complete construction of our own large-scale production plants in Brazil. We have very limited manufacturing experience and cannot be sure that we will be successful in establishing these larger-scale production operations in a timely manner and on a scale that will allow us to meet our plans for commercialization. To help establish our operations, we have outsourced some of our production process development to the contract manufacturers and to other third parties and are relying on them to help us achieve production efficiency in our commercial scale-up efforts. Such 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. Based on, among other things, the foregoing risks and uncertainties associated with launching manufacturing facilities and our reliance on third parties to address some of the challenges, 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, we may be unable to translate such success to commercial operations. If this occurs, our ability to commercialize our technology will be adversely 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 offtake 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 need to fund our research and development and related activities and to provide working capital to fund production, storage, distribution and other aspects of our business. 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 to construct and commission our large-scale production plants, and expect to continue to

incur costs in connection with our contract manufacturing arrangements.

Our anticipated working capital needs and our planned operating and capital expenditures for the remainder of 2012 and for 2013 will require significant inflows of cash from collaboration partners, as well as funding from equity or debt offerings, credit facilities or loans, or combinations of these sources. Specifically, we will need to raise cash in the fourth quarter in order to fund our operations beyond the fourth quarter of 2012. Meeting our anticipated working capital needs and funding our strategic plans for the remainder of 2012 and for 2013 will depend on our ability to identify and secure substantial additional sources of funding beyond those we have currently identified. Furthermore, some of our anticipated financing sources are subject to risk that we cannot meet milestones or are not yet subject to definitive agreements or funding commitments. If we fail to secure such funding in a timely manner, either in the short or long term, we may be forced to curtail our operations, which could include reductions or delays of planned capital expenditures or scaling back our operations. If we are forced to curtail our operations, we may be unable to continue or complete construction of certain planned production facilities, including our planned large-scale production plants at Usina São Martinho and Paraíso Bioenergia, 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 could 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. In May 2012, we completed another private placement of our common stock where we sold approximately 1.7 million shares of our common stock to certain members of our Board and parties related to them. In July 2012, we completed a sale of a convertible promissory note for cash proceeds of \$15.0 million and, in September 2012, we completed a sale of an additional convertible promissory note for additional cash proceeds of \$15.0 million. These notes issued in the third quarter of 2012 used the same conversion price and included the same covenants that were in the notes issued in February. 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 and could cause us to be at risk of defaults.

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.

Our business plan envisions that we will develop our principal production capacity in Brazil, primarily through arrangements with existing sugar and ethanol producers, but we have not yet commenced commercial operation of any of our planned large-scale production plants in Brazil. In 2010, we entered into an agreement with Usina São Martinho, a sugar and ethanol producer in Brazil, for the joint ownership and development of a production facility at the Usina São Martinho mill. More recently, we entered into a manufacturing agreement with Paraíso Bioenergia, also in Brazil, under which we will be responsible for construction of a production facility. In late 2011 and 2012 we commenced a reassessment of the timing of construction projects relating to the Usina São Martinho plant due to financing constraints and a decision to seek proof of concept at a smaller scale. As a result, the timeline for Usina São Martinho is unclear and adjustments to the project, up to and including re-negotiation or termination of the

agreements, are possible. The plan for Usina São Martinho depends on the timing and success of financing activities and production priorities. Based on these priorities and economic considerations relating to anticipated production costs at contract manufacturing facilities, we have adjusted our near-term focus to completion and commissioning the planned facility at Paraíso Bioenergia. A substantial component of our planned production capacity in the near and long term depends on the completion and commencement of operations at this production facility, and development of additional facilities using similar models thereafter.

Delays in completion of our large-scale production facilities will cause delays in our ramp-up of production and hamper our ability to reduce our production costs. For example, we have had 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, production economics at contract manufacturing facilities and related decisions regarding production volume at such facilities, and uncertainty relating to the timing of our planned large-scale facilities. Once our large-scale production 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 requires significant capital expenditures and subjects us to significant liquidity and production risks.

Our manufacturing facility at Paraíso Bioenergia is our principal focus for production capacity as we shift away from our dependence on contract manufacturing arrangements. Under the agreement with Paraíso Bioenergia, we are designing and building a fermentation and separation plant on leased space at the Paraíso Bioenergia facility, and we are responsible for financing the project. Our initial large-scale production facility construction plan was for the plant at Usina São Martinho and we were responsible for designing and managing the project. We had projected the construction costs of the new facility to total approximately \$100 million, but we are currently delaying further work on our facility at Usina São Martinho due to financial constraints and a decision to seek proof of concept at a smaller scale. While Usina São Martinho was obligated under our agreement to contribute up to approximately R\$61.8 million reais (approximately US\$30.4 million based on the exchange rate as of September 30, 2012), such contributions depended on, among other things, successful commencement of commercial operations at the plant. Based on our shifting manufacturing priorities and uncertainty regarding financing availability, we cannot currently predict when or if our facility at Usina São Martinho will be completed or commence commercial operations, which means that Usina São Martinho's anticipated contribution will be delayed and may never occur. Even if we decide not to fund construction projects, we may not be able to quickly or completely cease incurring costs associated with such projects. For example, we have continued to incur costs associated with the Usina São Martinho project even after we decided to put that project on hold, and expect that such costs will continue as we pay for work already done or committed and scale down construction activity. We anticipate funding construction of our plants at Paraíso Bioenergia and, if we decide to start up construction again, Usina São Martinho, with our existing funds and with additional 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. 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.

The construction and commissioning of our plant at Paraíso Bioenergia is subject to execution and economic risks. Our decision to focus our efforts for production capacity on the manufacturing facility at Paraíso Bioenergia and shift away from our dependence on contract manufacturers means that any failure to establish our plant at Paraíso Bioenergia could have a significant negative impact on our business, including our ability to achieve commercial viability for our products. The plant at Paraíso Bioenergia is under construction and we cannot be sure we will be able to complete construction and commissioning soon enough to commence commercial production to replace farnesene currently produced at contract manufacturing facilities. Furthermore, while we are moving our production focus to our plant at Paraíso Bioenergia based on an expectation that we will ultimately be able to produce farnesene at a lower cost using such facility, we cannot be sure when, or if, using such plant will in fact result in such lower production costs than contract manufacturing facilities. Also, with our facility at Paraíso Bioenergia, we will, for the first time, be the operator of a commercial fermentation and separation facility. We are inexperienced at operating plants and may face unexpected difficulties associated with the operation of the plant. For example, we have in the past, at certain contract manufacturing facilities, encountered significant delays and difficulties in ramping up production based on contamination in the production process, problems with plant utilities, lack of automation and related human error, issues arising from process modifications to reduce costs and adjust product specifications, and other similar challenges. Such challenges are likely to arise in our plant at Paraíso Bioenergia, and we cannot be certain that we will be able to remedy them quickly or effectively enough to achieve commercially viable near-term production costs and volumes.

As part of our arrangement to build the plant, we have an agreement with Paraíso Bioenergia that provides we are obligated to purchase from Paraíso Bioenergia sugarcane juice corresponding to up to a certain number of tons of sugarcane per year, along with specified water and vapor volumes. Until this annual volume is reached, we are restricted from purchasing sugarcane juice for processing in the facility from any third party, subject to limited exceptions, unless we pay the premium to Paraíso Bioenergia that we would have paid if we bought the juice from them. As such, we will be relying on Paraíso Bioenergia to supply such juice and utilities on a timely basis, in the volumes we need, and at competitive prices. If a third party can offer superior prices and Paraíso Bioenergia does not consent to our purchasing from such third party, we would be required to pay Paraíso Bioenergia using such juice, premium, which would have a negative impact on our production cost. Furthermore, we agreed to pay a price for the juice that is based on the lower of the cost of two other products produced by Paraíso Bioenergia using such juice, plus a premium. Paraíso Bioenergia may not want to sell sugarcane juice to us if the price of one of the other products is substantially higher than the one setting the price for the juice we purchase. While the agreement provides that Paraíso Bioenergia would have to pay a penalty to us if it fails to supply the agreed-upon volume of juice for a given month, the penalty may not be enough to compensate

us for the increased cost if third-party suppliers do not offer competitive prices. Also, if the prices of the other products produced by Paraíso Bioenergia increase, we could be forced to pay those increased prices for production without a related increase in the price at which we can sell our products, reducing or eliminating any margins we can otherwise achieve. If in the future these supply terms no longer provide a viable economic structure for the operation at Paraíso Bioenergia, we may be required to renegotiate our agreement, which could result in manufacturing disruptions and delays.

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

In late 2011 and 2012 we commenced a reassessment of the timing for construction projects relating to our planned large-scale production facility at Usina São Martinho due to financing constraints and a decision to seek proof of concept at a smaller scale. As a result, the timeline for the plant at Usina São Martinho is unclear and adjustments to the project, up to and including re-negotiation or termination of the agreements relating to the production facility, are possible. The consequences of such actions could cause us to incur obligations and expenses under the agreements with Usina São Martinho.

Furthermore, even if we are successful in establishing the plant at Usina São Martinho, the agreements governing the joint venture subject us to terms that may not be favorable to us under certain conditions. Under the agreements governing the joint venture, upon the commencement of plant operations, the joint venture has agreed to purchase, and Usina São Martinho has agreed to provide, feedstock for a price that is based on the average return that Usina 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 Usina São Martinho's investment plus a fixed interest rate. We may not be able to sell the output at a price that allows us to achieve anticipated, or any, level of profitability on the product we acquire under these terms. Similarly, the return that we are required to provide the joint venture for products after the first four years may have an adverse effect on the profitability we achieve from acquiring the mill's output. 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 fails to commence operations by the end of 2013, Usina São Martinho has the right to terminate the joint venture and require us to buy the joint venture's assets at fair value and transfer them to another location. In that event, we could incur significant costs and be required to find alternative locations for the facility. In addition, if Amyris Brasil becomes controlled, directly or indirectly, by a competitor of Usina São Martinho, then Usina São Martinho has the right to acquire our interest in the joint venture and if Usina 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 Usina 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 may seek 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, we may seek to enter into agreements with other sugar and ethanol producers in Brazil that require them to make a substantial capital or operating contribution to partner with us 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 Usina 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 excessive capital or operating contribution, or have concerns regarding our limited financial resources and the development stage of our business (particularly with respect to establishing manufacturing operations). 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 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 our existing contract manufacturing arrangements and planned mill facilities. 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 and relationships with 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 chemical conversion and production of end-products, as well as for production of Biofene (even after Paraíso Bioenergia or a similar plant commences commercial operations) to mitigate cost and volume risks at our large-scale production facilities. Setting up sufficient contract manufacturing facilities requires us to make significant capital expenditures, which reduces our cash and places this capital at risk. We incurred, and expect to continue to incur, significant expenditures in connection with our contract manufacturing arrangements. Furthermore, based on an evaluation of our assets associated with contract manufacturing facilities and anticipated levels of use of such facilities, we recorded a loss on write off of production assets of approximately \$5.5 million for the three months ended March 31, 2012. Further write off of such assets may occur in future quarters as we continue to evaluate and adjust our priorities for production, including the levels of utilization of our current and planned manufacturing facilities, which would cause us to incur additional losses associated with such facilities in the future. In addition, many of our contract manufacturing agreements contain terms that commit us to pay for capital expenditures and other costs incurred or expected to be earned by the plant operators and owners, which can result in contractual liability and losses for us even if we terminate a particular contract manufacturing arrangement or decide to reduce or stop production under such an arrangement. For example, we incurred a \$31.2 million loss in the first quarter of 2012 related to \$10.0 million in facility modification costs and \$21.2 million of fixed purchase commitment losses associated with a scale-back of production at certain facilities. We recognized an additional charge of \$1.4 million in the third quarter of 2012 associated with loss on fixed purchase commitments. Some of the contract manufacturing 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. For example, in the second quarter of 2012, one of our contract manufacturers sent us a notice of termination and demanded payment of certain ongoing costs and removal of our equipment in connection with our decision to halt production at that plant, and we had to negotiate the termination of this relationship. Another of our contract

manufacturers similarly made claims that we had breached an agreement by suspending production at that plant, and we had to negotiate a settlement of such claims.

Loss or termination of contract manufacturing relationships could be an additional source of risk. The failure to have multiple available supply options could create a risk for us if a single source or a limited number of sources of manufacturing runs into operational issues. In addition, if we are unable to secure the services of contract manufacturers when and as needed, we may lose customer opportunities and the growth of our business may be impaired. We cannot be sure that contract manufacturers will be available when we need their services, that they will be willing to dedicate a portion of their capacity to our projects, or that we will be able to reach acceptable price and other terms with them for the provision of their production services. If we shift priorities and stop or adjust anticipated production levels at contract manufacturers. In addition, reducing or stopping production at one facility while increasing or starting up production at another facility generally results in significant losses of production efficiency, which can persist for varying periods of time. 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.

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. As discussed above, our strategy for achieving this goal includes moving production away from contract manufacturers and into our own large-scale production plants at sugar and ethanol mills to increase our scale of operations, improving feedstock supply and other production economics. This strategy is in its early stages and is subject to numerous risks, including execution risks associated with building, commissioning and running a new, Amyris-controlled production facility for the first time. Furthermore, our production costs depend on many factors that could have a negative effect on our ability to offer our planned products at competitive prices. Key factors beyond production scale and feedstock cost that impact our production costs include yield, productivity, separation efficiency and chemical process efficiency. Yield refers to the amount of the desired molecule that can be produced from a fixed amount of feedstock. Productivity represents the rate at which our product is produced by a given yeast strain. Separation efficiency refers to the amount of desired product produced in the fermentation process that we are able to extract and the time that it takes to do so. Chemical process efficiency refers to the cost and yield for the chemical finishing steps that convert our target molecule into a desired product. In order to successfully enter transportation fuels and certain chemical markets, we must produce those products at significantly lower costs, which will require both substantially higher yields than we have achieved to date and other significant improvements in production efficiency, including in productivity and in separation and chemical process efficiencies. There can be no assurance that we will be able to make these improvements or reduce our production costs sufficiently to offer our planned products at competitive prices, and any such failure could have a material adverse impact on our business and prospects.

Our ability to establish substantial commercial sales of our products is subject to many risks, any of which could prevent or delay revenue growth and adversely impact our customer relationships, business and results of operations. There can be no assurance that our products will be approved or accepted by customers, that customers will choose our products over competing products, or that we will be able to sell our products profitably at prices and with features sufficient to establish demand. Although we are now selling squalane and some diesel fuel on a commercial basis, 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 need to continually establish that our products are comparable to, or better than, products they currently use that we seek to replace, ultimately 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, or at reasonable prices, may limit our ability to produce our products.

We anticipate that the production of our products will require large volumes of feedstock. To date, we have been relying on a mixture of feedstock sources for use at our contract manufacturing operations, including cane sugar, corn-based dextrose and beet molasses. For our large-scale production facilities in Brazil, we 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 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 adversely impacted.

We have entered into a number of agreements regarding the further development of certain of our products and, in some cases, for ultimate sale to the customer under the agreement. None of these agreements affirmatively obligates the other party to purchase specific quantities of any products at this time, and most contain important conditions that must be satisfied before any such purchases would 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 significant equity investments 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 Total, under which we may develop, produce and commercialize products with Total, which originally contemplated Total paying up to the first \$50 million in research costs for selected research and development projects. Under the agreement, 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. 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 with Total with respect to development and commercialization of Biofene for diesel. This represented an expansion of the initial collaboration that the parties established in 2010, and established a global, exclusive collaboration for the development of Biofene for diesel and a framework for the creation of a joint venture to manufacture and commercialize Biofene for diesel. In addition, a limited number of other potential products were subject to development for the joint venture on a non-exclusive basis. In July 2012, we entered into a further amendment of the collaboration agreement with Total that expanded Total's investment in the Biofene collaboration, incorporated the development of certain joint venture products for use in diesel and jet fuel into the scope of the collaboration, and changed the structure of the funding from Total to include a convertible debt mechanism. Under the new agreements, Total funded \$30 million in new cash investment during the third quarter of 2012. Further funding will be triggered by Total at annual decision points in mid-2013 and 2014. Upon completion of the research and development program, we and Total would form a joint

venture company that would have exclusive rights to produce and market renewable diesel and/or jet fuel. Should Total decide not to pursue commercialization, under certain conditions, it is eligible to recover up to \$105 million, payable in March 2017, in the form of cash or in the form of common stock at a conversion price of \$7.0682 per share.

Under the new agreements related to the July amendment, the \$50 million in funding by Total originally contemplated under the collaboration agreement is deemed to be exhausted, so the funding under the most recent amendment is all the funding still contemplated by our agreements with Total. We cannot be certain that Total will choose to continue funding the research and development program or ultimately opt in to participate in the anticipated joint venture. Under the new agreements, Total may, at certain annual decision points through a final decision date following the earlier of completion of the research and development program or December 31, 2016, refuse to continue funding or participating in the program and, if it does, any notes issued to Total to date will remain outstanding and become payable or convertible into our common stock. If Total chooses to demand repayment

of amounts advanced under the notes, we may not be able to repay them by the maturity date in March 2017 (the same maturity date as we have for \$25 million in convertible promissory notes issued earlier in February 2012), which could lead to defaults and our insolvency, and Total and other creditors could pursue collection claims against us. If the notes become convertible and Total chooses to convert them, the resulting issuance of common stock would be dilutive to other stockholders.

The new agreements provide that we will provide an exclusive license to our intellectual property related to the manufacture and commercialization of Biofene-based diesel and jet fuel to the above-mentioned fuels joint venture, but also provide that we may be required to provide such a license to Total before formation of the joint venture under certain circumstances such as our insolvency. Furthermore, the new agreements contemplate that Total can, if there is a deadlock in finalizing various matters related to the formation of the joint venture, initiate a bidding process where the fair value of the proposed joint venture would be determined and we would be required to choose whether to (i) sell our joint venture assets to Total for 50% of the joint venture value, (ii) proceed with formation of the joint venture, or (iii) proceed with the formation of the joint venture with Total as a 50% owner and accept Total's position regarding the funding requirements of the joint venture, or (iii) proceed with the formation of the joint venture, and then sell all or a portion of our 50% interest in the joint venture to Total for a price equal to the fair value multiplied by the percentage ownership of the joint venture sold to Total. If we are forced to relinquish our rights with respect to diesel and jet fuel under these scenarios (or under an early exclusive license as described above), our ability to continue pursuing our fuels business will be impaired.

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

Our business involves complex, global operations across a variety of markets and requires a management team and employee workforce that is knowledgeable in the many areas in which we operate. As we build our business, we will need to hire additional qualified research and development, management and other 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. The loss of any key member of our management or key technical and operational employees, or the failure to attract or retain such employees could prevent us from developing and commercializing our products for our target markets and executing our business strategy. We also may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the renewable chemicals and fuels area, or due to the availability of personnel with the qualifications or experience necessary for our business. In addition, our stock price has declined significantly over the last year, which may reduce 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.

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 partner with us to produce our products, we generally have planned to compensate them for the production of our products based on 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, our discussions and agreements with mill owners have contemplated sharing a portion of the realized gross margin on any sales of products 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 production 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 and other feedstocks can be volatile as a result of changes in industry policy and may increase the cost of production of our products.

In Brazil, Conselho dos Produtores de Cana, Açúcar e Álcool (Council of Sugarcane, Sugar and Ethanol Producers), or Consecana, an industry association of producers of sugarcane, sugar and ethanol, sets market terms and prices for general supply, lease and partnership agreements for sugarcane. 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. Similar principles apply to pricing of other feedstocks as well. 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 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.;

eariffs, 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. Various states within the U.S. could choose to regulate products made with GMMs as well. While the strain of genetically modified yeast that we currently use for the development and anticipate using for the commercial production of our target molecules, S. cerevisiae, is eligible for exemption from EPA review because it is recognized as posing a low risk, we must satisfy certain criteria to achieve this exemption, including but not limited to use of compliant containment structures and safety procedures, and we cannot be sure that we will meet such criteria in a timely manner, or at all. If exemption of S. cerevisiae is not obtained, our business may be substantially harmed. In addition to S. cerevisiae, we may seek to use different GMMs in the future that will require EPA approval. If approval of different GMMs is not secured, our ability to grow our business could be adversely affected.

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

In addition to our production operations in the U.S. and Brazil, we have been party to contract manufacturing agreements with parties in other production locations around the world, including Europe. The use of GMM technology is strictly regulated in the European Union, which has established various directives for member states regarding regulation of the use of such technology, including notification processes for contained use of such technology. We expect to encounter GMM regulations in most, if not all, of the countries in which we may seek to establish production capabilities, and 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 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). Under this program, we 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 (or similar laws and programs) 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. We cannot assure you that our products will be approved or accepted by customers or end consumers 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 (and the consumers who purchase products containing such chemicals) that our products are comparable to the chemicals that they currently use or that the use of our products is otherwise to their benefits, we will not be successful in entering these markets and our business will be adversely affected.

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

We currently incur 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 Brazilian 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 actions to fix 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 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 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 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 we must provide our products on a cost-competitive basis with these traditional products and other available alternatives. Some of our competitors may use their influence to impede the development and acceptance of renewable products of the type that we are seeking to produce.

We believe that for our chemical products to succeed in the market, we must demonstrate that our products are comparable

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

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

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

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

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 new molecules that can be produced using our technology, 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. 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. In the U.S. and in a number of other countries, regulations and policies encouraging production and use of alternative fuels have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline or diesel may cause demand for biofuels to decline and deter investment in the research and development of renewable fuels. For example, 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 and the case is currently on appeal in the Ninth Circuit. An affirmation of this ruling 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.

Concerns associated with renewable fuels, including land usage, national security interests and food crop usage, continue to receive legislative, industry and public attention. This attention could result in future legislation,

regulation and/or administrative action that could adversely affect our business. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations.

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

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

We use hazardous chemicals and radioactive and biological materials in our business and such materials are subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials both in the U.S. and overseas. Although we have implemented safety procedures for handling and disposing of these materials and related waste products in an effort to comply with these laws and regulations, we cannot be sure that our safety measures 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, with respect to technology, product development or manufacturing milestones needed to allow us to enter identified markets on a cost effective basis;

delays or greater than anticipated expenses associated with the completion or commissioning of new production facilities, or the time to ramp up and stabilize production following completion of a new production facility;

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

disruptions in the production process at any manufacturing facility;

losses associated with producing our products as we ramp to commercial production levels;

failure to recover value added tax (VAT) that we currently reflect as recoverable in our financial statements (e.g., due to failure to meet conditions for reimbursement of VAT under local law);

the timing, size and mix of sales to customers for our products;

increases in price or decreases in availability of feedstock;

the unavailability of contract manufacturing capacity altogether or at reasonable cost;

fluctuations in foreign currency exchange rates;

gains or losses associated with our hedging activities;

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

seasonal variability in production and sales of our products;

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

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

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

departure of executives or other key management employees resulting in transition and severance costs;

our ability to use our net operating loss 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. In addition, nearly all of our revenue to date has come from the sale of ethanol and reformulated ethanol-blended gasoline, with the remainder coming from collaborations and government grants and, more recently, sales of our renewable products. Effective in the third quarter of 2012, we transitioned out of the ethanol and reformulated ethanol-blended gasoline business. We do not expect to be able to replace much of the revenue lost in the near term as a result of this transition, particularly in 2012 and 2013 while we continue our efforts to establish a renewable products business.

As part of our operating plan for 2012, we have commenced reductions to, and expect to continue to reduce, our cost structure by improving efficiency in our operations and reducing non-critical expenditures. These efforts may include reductions to our workforce and adjustments to the timing and scope of planned capital expenditures in the coming quarters. Resulting headcount reductions to reduce operating expenses may result in reduced collaboration and government grant revenues to the extent that such headcount reductions reduce our ability to dedicate resources to activities funded by such collaborations and grants.

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

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

We have experienced, and expect to continue to experience, expansion of our business as we continue to make efforts to develop and bring our products to market. We have grown from 18 employees at the end of 2005 to 437 at September 30, 2012. 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 our strategy or plans are unsuccessful, 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 have commenced reductions to, and expect to continue to reduce, our cost structure by improving efficiency in our operations and reducing non-critical expenditures. These efforts may 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 adversely impacted.

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

Our commercial success will depend substantially on our ability to obtain patents and maintain adequate legal protection for our technologies and product candidates in the U.S. and other countries. As of October 31, 2012, we had 180 issued U.S. and foreign patents and 306 pending U.S. and foreign patent applications that were owned by or licensed to us. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies and future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We apply for patents covering both our technologies and product candidates, as we deem appropriate. However, we may fail to apply for patents on important technologies or product candidates in a timely fashion, or at all. Our existing and future patents may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products or technologies. In addition, the patent positions of companies like ours are highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of patent claims has emerged to date in the 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 international business partners and other parties. Our product development collaborations with third parties, including with Total, require us to share confidential information, including with employees of Total who are seconded to Amyris during the term of the collaboration. While we use reasonable

efforts to protect our trade secrets, our or our business partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, foreign courts are sometimes less willing than 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 third party's patent or other proprietary rights;

a court prohibiting us from selling or licensing our technologies or future products unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and

if a license is available from a third party, such third party may require us to pay substantial royalties or grant cross licenses to our patents or proprietary rights.

The industries in which we operate, and the biotechnology industry in particular, are characterized by frequent and extensive litigation regarding patents and other intellectual property rights. Many biotechnology companies have employed intellectual property litigation as a way to gain a competitive advantage. If any of our competitors have filed patent applications or obtained

patents that claim inventions also claimed by us, we may have to participate in interference proceedings declared by the relevant patent regulatory agency to determine priority of invention and, thus, the right to the patents for these inventions in the 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. Significant litigation would result in substantial costs, even if the eventual outcome is favorable to us and would divert management's attention from our business objectives. In addition, an adverse outcome in litigation could result in a substantial loss of our proprietary rights and we may lose our ability to exclude others from practicing our technology or producing our product candidates.

The laws of some foreign countries do not protect intellectual property rights to the same extent as do the laws of the 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. We may be sued for product liability.

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

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

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

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

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting. The process of implementing our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention of management. We cannot be certain that these measures will ensure that we maintain adequate controls over our financial processes and reporting in the future. In addition, to the extent we create joint ventures or have any variable interest entities and the financial statements of such entities are not prepared by us, we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in us adding monitoring and audit processes and increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future. This may be particularly true where we are establishing such entities with commercial partners that do not have sophisticated financial accounting processes in place, or where we are entering into new relationships at a rapid pace, straining our integration capacity. Additionally, if we do not receive the information from the joint venture or variable interest entity on a timely basis, this could cause delays in our external reporting. Even if we conclude, and our independent registered public accounting firm concurs, that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price. In addition, failure to comply with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed, and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business. If the value of our goodwill or other intangible assets becomes impaired, it could materially reduce the value of our assets and reduce our net income for the year in which the related impairment charges occur. We apply the applicable accounting principles set forth in the 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 in-process research and development acquired in a business combination. We have used the "income method," which applies a probability weighting that considers the risk of development and commercialization, to the estimated future net cash flows that are derived from projected sales revenues and estimated costs. These projections are based on factors such as relevant market size, pricing of similar products, and expected industry trends. The estimated future net cash flows are then discounted to the present value using an appropriate discount rate. These assets are treated as indefinite-lived intangible assets until completion or abandonment of the projects, at which time the assets will be amortized over the remaining useful life or written off, as appropriate. If the carrying amount of the assets is greater than the measures of fair value, impairment is considered to have occurred and a write-down of the asset is recorded. Any finding that the value of our intangible assets has been impaired would require us to write-down the impaired portion, which could reduce the value of our assets and reduce our net income for the year in which the related impairment charges occur. As of September 30, 2012, we had a net carrying value of approximately \$9.1 million in in-process research and development and goodwill associated with our acquisition of Draths Corporation.

Our ability to use our net operating loss 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 government contract revenues 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 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, government and other processes to comply with the grant 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. We are subject to follow-on audits by the DOE from time to time to review our compliance and other matters.

In June 2012, we entered into a Technology Investment Agreement with The Defense Advanced Research Projects Agency (DARPA), under which we are performing certain research and development activities funded in part by DARPA. Under the agreement, we could receive funding of up to approximately \$8.0 million over two years based on achievement of program milestones and would be responsible for contributions equivalent to approximately \$900,000. We cannot be sure that we will receive the amount of funding available under the agreement. For example, we may not be able to meet the project milestones on a timely basis or at all. In addition, DARPA may determine that the project is not producing beneficial results commensurate with the expense, and seek to terminate the agreement in accordance with its terms.

If the DOE or DARPA terminate their agreements with us, in addition to reducing our revenues, our U.S.-based research and development activities could be impaired, which would 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 supplie