ADVANCED ENERGY INDUSTRIES INC

Form 10-O May 08, 2012

Table Of Contents

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

FORM 10-Q

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

For the quarterly period ended March 31, 2012

or

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

o OF 1934.

> For the transition period from to

Commission file number: 000-26966

ADVANCED ENERGY INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Delaware 84-0846841

(State or other jurisdiction of incorporation or (I.R.S. Employer Identification No.)

organization)

1625 Sharp Point Drive, Fort Collins, CO 80525

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (970) 221-4670

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 b No o

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

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

Non-accelerated filer o

Accelerated filer b (Do not check if a smaller Large accelerated filer o Smaller reporting company o

reporting company)

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

As of April 30, 2012, there were 39,731,792 shares of the registrant's Common Stock, par value \$0.001 per share, outstanding.

ADVANCED ENERGY INDUSTRIE	ES, INC.
---------------------------	----------

FORM 10-Q TABLE OF CONTENTS

	Pag
PART I FINANCIAL STATEMENTS	<u>3</u>
ITEM 1. UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	<u>3</u>
Condensed Consolidated Balance Sheets	<u>3</u>
Condensed Consolidated Statements of Operations	<u>4</u>
Condensed Consolidated Statements of Comprehensive Income	<u>5</u>
Condensed Consolidated Statements of Cash Flows	<u>6</u>
Notes to Condensed Consolidated Financial Statements	7
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULT OF OPERATIONS	<u>TS</u> <u>19</u>
ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>26</u>
ITEM 4. CONTROLS AND PROCEDURES	<u>27</u>
PART II OTHER INFORMATION	<u>28</u>
ITEM 1. LEGAL PROCEEDINGS	<u>28</u>
ITEM 1A. RISK FACTORS	<u>28</u>
ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS	<u>29</u>
ITEM 3. DEFAULTS UPON SENIOR SECURITIES	<u>29</u>
ITEM 4. MINE SAFETY DISCLOSURES	<u>29</u>
ITEM 5. OTHER INFORMATION	<u>29</u>
ITEM 6. EXHIBITS	<u>29</u>
SIGNATURES EX-31.1 EX-31.2 EX-32.1 EX-32.2	<u>30</u>
2	

Table Of Contents

PART I FINANCIAL STATEMENTS

ITEM 1. UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS ADVANCED ENERGY INDUSTRIES, INC.

Condensed Consolidated Balance Sheets *

(In thousands, except per share amounts)

(In thousands, except per share amounts)	March 31, 2012	December 31, 2011
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$125,418	\$117,639
Marketable securities	25,325	25,567
Accounts receivable, net of allowances of \$6,693 and \$6,796, respectively	103,414	132,485
Inventories, net of reserves of \$14,711 and \$13,614, respectively	83,164	80,283
Deferred income tax assets	9,011	9,014
Income taxes receivable	14,863	13,826
Other current assets	10,730	11,672
Total current assets	371,925	390,486
Property and equipment, net	41,247	42,338
OTHER ASSETS:		
Deposits and other	9,031	8,959
Goodwill	46,515	46,515
Other intangible assets, net	42,066	43,438
Deferred income tax assets	1,706	1,642
Total assets	\$512,490	\$533,378
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$38,225	\$44,828
Income taxes payable	2,670	3,310
Accrued payroll and employee benefits	9,565	9,184
Accrued warranty expense	8,747	8,433
Other accrued expenses	11,227	10,800
Customer deposits	8,180	14,689
Total current liabilities	78,614	91,244
LONG-TERM LIABILITIES:		
Deferred income tax liabilities	6,999	6,475
Uncertain tax positions	16,404	16,404
Accrued warranty expense	5,572	6,286
Other long-term liabilities	15,349	5,630
Total liabilities	122,938	126,039
Commitments and contingencies (Note 16)		
STOCKHOLDERS' EQUITY:		
Preferred stock, \$0.001 par value, 1,000 shares authorized, none issued and outstanding		
Common stock, \$0.001 par value, 70,000 shares authorized; 40,056 and 41,956		
issued and outstanding, respectively	40	42
Additional paid-in capital	236,928	254,003
Retained earnings	125,836	124,767
Accumulated other comprehensive income	26,748	28,527
Total stockholders' equity	389,552	407,339
Total liabilities and stockholders' equity	\$512,490	\$533,378

* Amounts as of March 31, 2012 are unaudited. Amounts as of December 31, 2011 are derived from the December 31, 2011 audited Consolidated Financial Statements.

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Table Of Contents

ADVANCED ENERGY INDUSTRIES, INC.

Condensed Consolidated Statements of Operations (Unaudited) (In thousands, except per share amounts)

	Three Months Ended	
	March 31,	
	2012	2011
SALES	\$105,787	\$137,652
COST OF SALES	66,043	75,607
GROSS PROFIT	39,744	62,045
OPERATING EXPENSES:		
Research and development	15,115	15,862
Selling, general, and administrative	20,059	20,905
Amortization of intangible assets	1,372	921
Restructuring charges	2,575	_
Total operating expenses	39,121	37,688
OPERATING INCOME	623	24,357
OTHER INCOME, NET	411	663
Income from continuing operations before income taxes	1,034	25,020
Provision for income taxes	268	6,254
INCOME FROM CONTINUING OPERATIONS, NET OF INCOME TAXES	766	18,766
Income from discontinued operations, net of income taxes	303	140
NET INCOME	\$1,069	\$18,906
Basic weighted-average common shares outstanding	40,781	43,440
Diluted weighted-average common shares outstanding	41,292	44,133
Diffuted weighted-average common shares outstanding	41,292	44,133
EARNINGS PER SHARE:		
CONTINUING OPERATIONS:		
BASIC EARNINGS PER SHARE	\$0.02	\$0.43
DILUTED EARNINGS PER SHARE	\$0.02	\$0.43
DISCONTINUED OPERATIONS		
BASIC EARNINGS PER SHARE	\$0.01	\$0.00
DILUTED EARNINGS PER SHARE	\$0.01	\$0.00
NET INCOME:		
BASIC EARNINGS PER SHARE	\$0.03	\$0.44
DILUTED EARNINGS PER SHARE	\$0.03	\$0.43

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Table Of Contents

ADVANCED ENERGY INDUSTRIES, INC.

Condensed Consolidated Statements of Comprehensive Income (Unaudited) (In thousands)

	Three months ended March		
	31,		
	2012	2011	
Net income	1,069	18,906	
Other comprehensive income, net of tax:			
Foreign currency translation adjustment	(1,798) (287)
Unrealized gains (losses) on securities	19	(3)
Comprehensive income (loss)	(710) 18,616	

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

Table Of Contents

ADVANCED ENERGY INDUSTRIES, INC.

Condensed Consolidated Statements of Cash Flows (Unaudited) (In thousands)

	Three Months Ended March 31,			
	2012		2011	
CASH FLOWS FROM OPERATING ACTIVITIES:	2012		2011	
Net income	\$1,069		\$18,906	
Adjustments to reconcile net income to net cash provided by operating activities:	. ,		, ,	
Depreciation and amortization	4,213		3,263	
Stock-based compensation expense	5,009		2,740	
Provision (benefit) for deferred income taxes	478		(180)
Restructuring charges	2,575		_	ĺ
Net loss on disposal of assets	632		556	
Changes in operating assets and liabilities:				
Accounts receivable	28,760		(904)
Inventories	(2,306)	(11,927)
Other current assets	1,108		3,490	
Accounts payable	(6,824)	(4,212)
Other current liabilities and accrued expenses	1,753		(9,751)
Income taxes	(1,776)	386	
Non-current liabilities			348	
Net cash provided by operating activities	34,691		2,715	
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of marketable securities	(4,335)	22	
Proceeds from sale of marketable securities	4,563		2,000	
Proceeds from the sale of assets	_		16	
Purchases of property and equipment	(3,120)	(4,428)
Net cash used in investing activities	(2,892)	(2,390)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Payments on capital lease obligations	(23)	(39)
Purchase and retirement of treasury stock	(21,934)	_	
Proceeds from exercise of stock options	101		1,621	
Excess tax from stock-based compensation deduction	(254)	(88))
Net cash provided by (used in) financing activities	(22,110)	1,494	
EFFECT OF CURRENCY TRANSLATION ON CASH	(1,910)	(315)
INCREASE IN CASH AND CASH EQUIVALENTS	7,779		1,504	
CASH AND CASH EQUIVALENTS, beginning of period	117,639		130,914	
CASH AND CASH EQUIVALENTS, end of period	\$125,418		\$132,418	
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:				
Cash paid for interest	\$14		\$10	
Cash paid for income taxes	1,168		6,246	
Cash received for refunds of income taxes	5		176	
Cash held in banks outside the United States	57,034		58,494	
The accompanying notes are an integral part of these Condensed Consolidated Financial	Statements.			

Table Of Contents

ADVANCED ENERGY INDUSTRIES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1.BASIS OF PRESENTATION

We design, manufacture, sell, and support power conversion products that transform power into various usable forms. Our products enable manufacturing processes that use thin-film deposition for various products, such as semiconductor devices, flat panel displays, solar panels, and architectural glass. We also supply thermal instrumentation products for advanced temperature control in the thin-film process for these same markets. Our solar inverter products support renewable power generation solutions for residential, commercial, and utility-scale solar projects and installations. Our network of global service support centers offer repair services, conversions, upgrades, and refurbishments to companies using our products. We also offer a wide variety of operations and maintenance service plans that can be tailored for individual photovoltaic ("PV") sites of all sizes.

We are organized into two strategic business units ("SBU") based on the products and services provided. Thin Films Processing Power Conversion and Thermal Instrumentation ("Thin Films") SBU offers our products for direct current ("DC"), pulsed DC mid frequency, and radio frequency ("RF") power supplies, matching networks and RF instrumentation as well as thermal instrumentation products.

Solar Energy SBU offers both a transformer-based or transformerless advanced grid-tied PV inverter solution for residential, commercial and utility-scale system installations. Our PV inverters are designed to convert renewable solar power, drawn from large and small scale solar arrays, into high-quality, reliable electrical power. In the opinion of management, the accompanying unaudited Condensed Consolidated Financial Statements contain all adjustments, consisting of normal, recurring adjustments, necessary to present fairly the financial position of Advanced Energy Industries, Inc., a Delaware corporation, and its wholly-owned subsidiaries ("we", "us", "our", "Advanced Energy", or the "Company") at March 31, 2012, and the results of our operations and cash flows for the three months ended March 31, 2012 and 2011.

The Condensed Consolidated Financial Statements included herein have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations. These unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and Notes thereto contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 and other financial information filed with the SEC.

ESTIMATES AND ASSUMPTIONS

The preparation of our Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We believe that the significant estimates, assumptions, and judgments when accounting for items and matters such as allowances for doubtful accounts, excess and obsolete inventory, warranty reserves, acquisitions, asset valuations, goodwill, asset life, depreciation, amortization, recoverability of assets, impairments, deferred revenue, stock option and restricted stock grants, taxes, and other provisions are reasonable, based upon information available at the time they are made. Actual results may differ from these estimates, making it possible that a change in these estimates could occur in the near term.

REVENUE RECOGNITION

Our accounting policies are described in our audited Consolidated Financial Statements and Notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2011.

NEW ACCOUNTING STANDARDS

From time to time, the Financial Accounting Standards Board ("FASB") or other standards setting bodies issue new accounting pronouncements. Updates to the FASB Accounting Standards Codification ("ASC") are communicated through

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

issuance of an Accounting Standards Update ("ASU"). Unless otherwise discussed, we believe that the impact of recently issued guidance, whether adopted or to be adopted in the future, is not expected to have a material impact on the Condensed Consolidated Financial Statements upon adoption.

NOTE 2. BUSINESS ACQUISITION AND DISPOSITION Acquisition

On May 3, 2010, we acquired PV Powered, a privately-held Oregon corporation based in Bend, Oregon, pursuant to an Agreement and Plan of Merger dated March 24, 2010 between Advanced Energy, PV Powered, and Neptune Acquisition Sub, Inc. ("Acquisition Sub"), an Oregon corporation and wholly-owned subsidiary of Advanced Energy, and Amendment No. 1 to the Agreement and Plan of Merger dated April 21, 2010 (together with the Agreement and Plan of Merger, the "Merger Agreement"). Pursuant to the Merger Agreement, Acquisition Sub merged with and into PV Powered, with PV Powered being the surviving corporation and a wholly-owned subsidiary of Advanced Energy (the "Merger" or "Acquisition").

PV Powered is a leading manufacturer of grid-tied PV inverters in the residential, commercial and utility-scale markets. PV Powered manufactures high-reliability transformer-based PV inverters utilized in residential, commercial roof top and ground mount systems in the North American market. As of the time of the acquisition, its inverters ranged in size from 30 kilowatts ("kW") to two megawatts for the commercial market and one kW to five kW for the residential market, all of which had market-leading efficiency ratings.

The PV Powered product line will continue to be assembled in Bend, Oregon although certain sub-assembly manufacturing will be moved to our Shenzhen, China production facility. The acquisition of PV Powered enables us to offer the

solar inverter market a more complete suite of products in wide power ranges and increases the number of solar array opportunities for which our products can be considered for purchase.

Disposition

On October 15, 2010, we completed the sale of our gas flow control business, which includes the Aera® mass flow control and related product lines to Hitachi Metals, Ltd. ("Hitachi"), for approximately \$43.3 million. Assets and liabilities sold include, without limitation, inventories, real property in Hachioji, Japan, equipment, certain contracts, intellectual property rights related to the gas flow control business and certain warranty liability obligations. In connection with the closing of this asset disposition, we entered into a Master Services Agreement and a Supplemental Transition Services Agreement where we will provide certain transition services until October 2011 and we became an authorized service provider for Hitachi in all countries other than Japan. In March 2012, we entered into an agreement to sell certain fixed assets to Hitachi and cease providing contract manufacturing services. We expect this transaction to close in either the second or third quarter of 2012.

In accordance with authoritative accounting guidance for reporting discontinued operations, the results of continuing operations were reduced by the revenue and costs associated with the gas flow control business, which are included in the income from discontinued operations, net of income taxes, in our Condensed Consolidated Statements of Operations.

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Operating results of discontinued operations are as follows (in thousands):

	Three Months Ended March 31,		
	2012	2011	
Sales	\$4,576	\$6,346	
Cost of sales	5,145	6,686	
Gross profit	(569) (340)
Operating expenses:			
Research and development		8	
Selling, general, and administrative	45	50	
Total operating expenses	45	58	
Operating income (loss) from discontinued operations	(614) (398)
Other income	1,023	611	
Income from discontinued operations before income taxes	409	213	
Provision for income taxes	106	73	
Income from discontinued operations, net of income taxes	\$303	\$140	

NOTE 3. INCOME TAXES

The following table sets out the tax expense and the effective tax rate for our income from continuing operations (in thousands):

	Three Months Ended March 31,		
	2012	2011	
Provision for income taxes:			
Income from continuing operations before income taxes	\$1,034	\$25,020	
Provision for income taxes	268	6,254	
Effective tax rate	25.9	% 25.0	%

Our tax rate is lower than the U.S. federal income tax rate primarily due to the benefit of earnings in foreign jurisdictions, which are subject to lower tax rates. We plan to repatriate approximately \$30.0 million from Japan during the second quarter of 2012, for which a deferred income tax expense of \$2.1 million was recorded in 2010. Other than this planned repatriation, undistributed earnings of foreign subsidiaries are considered to be permanently reinvested and accordingly, no provision for U.S. federal and state income taxes or foreign withholding taxes has been made.

Our policy is to classify accrued penalties and interest related to unrecognized tax benefits in our income tax provision. For the three months ended March 31, 2012 and 2011, the amount of interest and penalties accrued related to our unrecognized tax benefits was immaterial.

NOTE 4. EARNINGS PER SHARE

Basic earnings per share ("EPS") is computed by dividing income available to common stockholders by the weighted-average number of common shares outstanding during the period. The computation of diluted EPS is similar to the computation of basic EPS except that the numerator is increased to exclude charges that would not have been incurred, and the denominator is increased to include the number of additional common shares that would have been outstanding (using the if-converted and treasury stock methods), if securities containing potentially dilutive common shares (stock options and restricted stock units) had been converted to common shares, and if such assumed conversion is dilutive.

g

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following is a reconciliation of the weighted-average shares outstanding used in the calculation of basic and diluted EPS for the three months ended March 31, 2012 and 2011 (in thousands, except per share data):

	2012	2011
Income from continuing operations, net of income taxes	\$766	\$18,766
Basic weighted-average common shares outstanding	40,781	43,440
Assumed exercise of dilutive stock options and restricted stock units	511	693
Diluted weighted-average common shares outstanding	41,292	44,133
Income from Continuing Operations:		
Earnings per share:		
Basic earnings per share	\$0.02	\$0.43
Diluted earnings per share	\$0.02	\$0.43

The following stock options and restricted units were excluded in the computation of diluted earnings per share because they were anti-dilutive:

	Three months ended March 31,		
	2012	2011	
Stock options	5,847	3,311	
Restricted stock units	23	_	
Total	5,870	3,311	

Stock Buyback

In November 2011, our Board of Directors authorized a program to repurchase up to \$75.0 million of our common stock over a twelve month period. Under this program, during the three months ended March 31, 2012, we repurchased and retired 2.0 million shares of our common stock for a total of \$21.9 million. In total, we have repurchased and retired 3.7 million shares of our common stock for a total of \$39.8 million.

All shares repurchased were executed in the open market and no shares were repurchased from related parties. Repurchased shares were retired and assumed the status of authorized and unissued shares.

NOTE 5. MARKETABLE SECURITIES

Our investments with original maturities of more than three months at time of purchase are considered marketable securities available for sale.

The composition of our marketable securities is as follows (in thousands):

-	March 31,		December 3	31,
	2012		2011	
	Cost	Fair Value	Cost	Fair Value
Commercial paper	\$3,597	\$3,597	\$2,395	\$2,395
Certificates of deposit	8,781	8,781	8,333	8,326
Corporate bonds/notes	8,175	8,176	7,534	7,523
Agency bonds/notes	4,769	4,771	7,320	7,323
Total marketable securities	\$25,322	\$25,325	\$25,582	\$25,567

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The maturities of our marketable securities available for sale as of March 31, 2012 are as follows:

	Earnest		Latest
Commercial paper	4/26/2012	to	7/23/2012
Certificates of deposit	4/14/2012	to	2/14/2014
Corporate bonds/notes	5/15/2012	to	3/15/2013
Agency bonds/notes	7/15/2012	to	11/2/2012

The value and liquidity of our marketable securities are affected by market conditions, as well as, the ability of the issuer to make principal and interest payments when due, and the functioning of the markets in which these securities are traded. Our current investments in marketable securities are expected to be liquidated during the next twelve months.

As of March 31, 2012, we do not believe any of the underlying issuers of our marketable securities are presently at risk of default.

NOTE 6 DERIVATIVE FINANCIAL

INSTRUMENTS

We are impacted by changes in foreign currency exchange rates. We manage these risks through the use of derivative financial instruments, primarily forward contracts. During the three months ended March 31, 2012, we entered into foreign currency exchange forward contracts to manage the exchange rate risk associated with intercompany debt denominated in nonfunctional currencies. These derivative instruments are not designated as hedges; however, they do offset the fluctuations of our intercompany debt due to foreign exchange rate changes.

The notional amount of foreign currency exchange contracts was \$41.5 million at March 31, 2012 and the fair value of these contracts was immaterial at March 31, 2012. During the three months ended March 31, 2012 we recognized \$1.0 million of losses on our foreign currency exchange contracts. These losses were offset by corresponding gains on the related intercompany debt and both are included as a component of other income, net, in our Condensed Consolidated Statements of Operations.

We did not enter into foreign currency forward contracts during the three months ended March 31, 2011.

NOTE 7. ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

Fair Value Hierarchy

Financial assets and liabilities recorded at fair value in our Condensed Consolidated Balance Sheets are categorized based upon a fair value hierarchy established by U.S. GAAP, which prioritizes the inputs used to measure fair value into the following levels:

- Level 1: Quoted market prices in active markets for identical assets or liabilities at the measurement date.
 - Quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar
- Level 2: assets and liabilities in markets that are not active, or other inputs that are observable and can be corroborated by observable market data.
 - Inputs reflect management's best estimates and assumptions of what market participants would use in
- Level 3: pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the valuation of the instruments.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables present information about our financial assets measured at fair value, on a recurring basis, as of March 31, 2012, and December 31, 2011. The tables indicate the fair value hierarchy of the valuation techniques utilized to determine such fair value. We did not have any financial liabilities measured at fair value, on a recurring basis, as of March 31, 2012, and December 31, 2011.

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

March 31, 2012	Level 1 (In thousands)	Level 2	Level 3	Total
Commercial paper	\$ —	\$3,597	\$ —	\$3,597
Certificates of deposit	_	8,781		8,781
Corporate bonds/notes	8,176			8,176
Agency bonds/notes	4,771			4,771
Total	\$12,947	\$12,378	\$ —	\$25,325
December 31, 2011	Level 1 (In thousands)	Level 2	Level 3	Total
Commercial paper	\$	\$2,395	\$ —	\$2,395
Certificates of deposit	_	8,326		8,326
Corporate bonds/notes	7,523	_		7,523
Agency bonds/notes	7,323	_		7,323
Total	\$14,846	\$10,721	\$	\$25,567

We did not have any Level 3 investments or financial liabilities measured at fair value, on a recurring basis, as of March 31, 2012 and December 31, 2011. There were no transfers in or out of Level 1, 2, or 3 fair value measurements during the three months ended March 31, 2012.

NOTE 8. INVENTORIES

Our inventories are valued at the lower of cost or market and computed on a first-in, first-out (FIFO) basis. Components of inventories are as follows (in thousands):

	March 31,	December 31,
	2012	2011
Parts and raw materials	\$55,856	\$57,962
Work in process	5,946	3,708
Finished goods	21,362	18,613
	\$83 164	\$80 283

NOTE 9. PROPERTY AND EQUIPMENT

Details of property and equipment are as follows (in thousands):

	March 31,	December 31,
	2012	2011
Buildings and land	\$1,684	\$1,647
Machinery and equipment	42,593	40,126
Computer and communication equipment	24,543	24,097
Furniture and fixtures	2,451	2,648
Vehicles	430	464
Leasehold improvements	27,068	29,680
Construction in process	6,191	6,352
	104,960	105,014
Less: Accumulated depreciation	(63,713) (62,676
	\$41,247	\$42,338

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Depreciation expense recorded in continuing operations is as follows (in thousands):

Three mon	ths ended March
31,	
2012	2011
\$2,841	\$2,342

Depreciation expense

NOTE 10. GOODWILL

The following summarizes the changes in goodwill during the three months ended March 31, 2012 and 2011 (in thousands):

	Three Months Ended March 31,		
	2012	2011	
Gross carrying amount, beginning of period	\$46,515	\$48,360	
Additions and adjustments		_	
Impairments	_		
Gross carrying amount, end of period	\$46,515	\$48,360	

NOTE 11. INTANGIBLE ASSETS

Included in our other intangible assets are assets acquired in a business combination that are used in research and development activities. These assets are considered to have indefinite lives until the completion or abandonment of the associated research and development efforts and are presented as non-amortizable intangibles in the tables below. Other intangible assets consisted of the following as of March 31, 2012 (in thousands, except weighted-average useful life):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Life in Years
Amortizable intangibles:				
Technology-based	\$37,922	\$(7,044)	\$30,878	7
Trademarks and other	8,210	(1,044)	7,166	8
Total amortizable intangibles	46,132	(8,088)	38,044	
Non-amortizing intangibles	4,022	_	4,022	
Total intangible assets	\$50,154	\$(8,088)	\$42,066	

Other intangible assets consisted of the following as of December 31, 2011 (in thousands, except weighted-average useful life):

userui iiie).	Gross Carrying Amount	Accumulated Amortization		Net Carrying Amount	Weighted-Average Useful Life in Years
Amortizable intangibles:					
Technology-based	\$37,922	\$(5,841)	\$32,081	7
Trademarks and other	8,210	(875)	7,335	8
Total amortizable intangibles	46,132	(6,716)	39,416	
Non-amortizing intangibles	4,022			4,022	
Total intangible assets	\$50,154	\$(6,716)	\$43,438	
40					

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Amortization expense relating to other intangible assets included in our income from continuing operations is as follows (in thousands):

	Three month	Three months ended March		
	31,			
	2012	2011		
Amortization expense	\$1,372	\$921		

Estimated amortization expense related to amortizable intangibles based on estimates of when in-process research and development is anticipated to move into production for each of the five years 2012 through 2016 and thereafter is as follows (in thousands):

Year Ending December 31,	
2012 (remaining)	\$4,182
2013	8,069
2014	8,854
2015	8,407
2016	6,239
Thereafter	6,315
	\$42,066

NOTE 12. RESTRUCTURING COSTS

In September 2011, we approved and committed to several initiatives to realign our manufacturing and research and development activities in order to foster growth and enhance profitability. These initiatives are designed to align research and development activities with the location of our customers and reduce product costs. Under this plan, we have reduced our global headcount by approximately 210 people or 12.6% of our total headcount, begun consolidation of our facilities by terminating or exiting several leases, and recorded impairments for assets no longer in use due to the restructuring of our business.

Over the next 6 to 12 months, we will continue to evaluate our cost structure as we close facilities and relocate certain functions and expect to incur an additional \$2.0 to \$6.0 million of restructuring costs during this period. Estimated total expenses to be incurred under this plan are between \$12.0 and \$16.0 million including the amounts recognized in 2011 and those noted below. Of this total, approximately \$4.5 to \$5.0 million relates to severance costs, \$3.0 million relates to asset impairments, and \$6.0 to \$10.0 million relates to costs to close facilities and relocate portions of our manufacturing.

The following table summarizes the components of our restructuring costs incurred under this plan (in thousands):

	Three months	Cumulative costs
	ended	through
	March 31, 2012	March 31, 2012
Severance and related costs	\$373	\$3,994
Property and equipment impairments	812	2,551
Facility closure costs	1,390	3,378
Total restructuring charges	\$2,575	\$9,923

The following table summarizes our restructuring liabilities under the plan (in thousands):

	Balances at December 31, 2011		Cost paid or otherwise settled	Effect of change in exchange rates	Balances at March 31, 2012	
Severance and related costs	\$800	\$373	\$(799) \$(9) \$365	
Property and equipment impairments	_	812	(812) (2) (2)

Facility closure costs	1,019	1,390	(1,221) —	1,188
Total restructuring liabilities	\$1.819	\$2,575	\$(2.832) \$(11) \$1,551

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

NOTE 13. WARRANTIES

Provisions of our sales agreements include product warranties customary to these types of agreements, ranging from 18 months to 24 months following installation for Thin Films and 5 years to 10 years following installation for Solar Energy. We also offer our Solar Energy customers the option to purchase additional warranty coverage up to 20 years. Our provision for the estimated cost of warranties is recorded when revenue is recognized. The warranty provision is based on historical experience by product, configuration and geographic region.

Accruals are established for warranty issues that are probable to result in future costs. Changes in accrued product warranties are as follows (in thousands):

	Three months ended March 31,			
	2012	2011		
Balances at beginning of period	\$14,719	\$12,949		
Increases to accruals related to sales during the period	1,835	2,551		
Warranty expenditures	(2,235) (2,072)	
Balances at end of period	\$14,319	\$13,428		

NOTE 14. STOCK-BASED COMPENSATION

We recognize stock-based compensation expense based on the fair value of the awards issued. Stock-based compensation (in thousands) for the three months ended March 31 2012 and 2011 was \$5,009 and \$2,740, respectively.

Stock Options

Stock option awards are generally granted with an exercise price equal to the market price of our stock at the date of grant, a four-year vesting schedule. and a term of 10 years.

Under the 2012 - 2014 Long Term Incentive Plan ("LTI Plan"), we made grants of performance based options and awards during the first quarter of 2012 which will vest annually over a three year period based on the achievement of the Company's return on net assets targets. The fair value of each grant was estimated on the date of grant using the Black-Scholes-Merton option pricing model utilizing an expected volatility of 61.5%, a risk-free rate of 1.2%, a dividend yield of zero, and an expected term of 5.9 years. The weighted-average grant date fair value of the options is \$6.19 per share. The weighted average grant date fair value of the awards is \$11.03 per share.

A summary of our stock option activity for the three months ended March 31, 2012 is as follows (in thousands):

5,821	
1,557	
(36)
(322)
(73)
6,947	
	1,557 (36 (322 (73

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Restricted Stock Units

A summary of our non-vested Restricted Stock Units ("RSU") activity for the three months ended March 31, 2012 is as follows (in thousands):

	Shares
Balance at December 31, 2011	764
RSUs granted	10
RSUs vested	(56)
RSUs forfeited	(54)
Balance at March 31, 2012	664

NOTE 15. ACCUMULATED OTHER COMPREHENSIVE INCOME

Accumulated other comprehensive income consisted of the following (in thousands):

			Total	
	Foreign Currency	Unrealized Gains	Accumulated	
		Adjustments (Losses) on		
	Aujustinents	Securities	Comprehensive	
			Income	
Balances at December 31, 2011	\$28,542	\$(15)	\$28,527	
Current period other comprehensive income (loss)	(1,798)	19	(1,779)
Balances at March 31, 2012	\$26,744	\$4	\$26,748	

NOTE 16. COMMITMENTS AND CONTINGENCIES

We have firm purchase commitments and agreements with various suppliers to ensure the availability of components. The obligation as of March 31, 2012 is approximately \$66.2 million. Our policy with respect to all purchase commitments, is to record losses, if any, when they are probable and reasonably estimable. We believe we have an adequate provision for potential exposure related to inventory on order that may go unused.

NOTE 17. RELATED PARTY TRANSACTIONS

During the three months ended March 31, 2012 and 2011, we had the following related party transactions (in thousands):

	Three months ended March 31		
	2012	2011	
Sales - related parties	\$154	\$1,010	
Rent expense - related parties	460	612	

Sales - Related Parties

Members of our Board of Directors hold various executive positions and serve as directors at other companies, including companies that are our customers. During the three months ended March 31, 2012 we had sales to two such companies as noted above and aggregate accounts receivable from two such customers totaled \$47,000 at March 31, 2012. During the three months ended March 31, 2011 we had sales to three such companies as noted above and aggregate accounts receivable from two such customers totaled \$48,000 at December 31, 2011.

Rent Expense - Related Parties

We lease our executive offices, research and development, and manufacturing facilities in Fort Collins, Colorado from a limited liability partnership in which Douglas Schatz, our Chairman of the Board and former Chief Executive Officer, holds

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

an interest. The leases relating to these spaces expire during 2021 and obligate us to total annual payments of approximately \$1.4 million, which includes facilities rent and common area maintenance costs.

NOTE 18. SIGNIFICANT CUSTOMER INFORMATION

Applied Materials, Inc. is our largest customer and our only customer that accounts for 10% or more of our sales. Sales to Applied Materials as a percent of total sales were as follows:

Three months ended March 31, 2012 2011 16.9 % 15.4

Applied Materials

No customer accounted for 10% or more of our gross accounts receivable as of March 31, 2012 or December 31, 2011.

NOTE 19. SEGMENT INFORMATION

Thin Films offers power conversion products for direct current, pulsed DC mid frequency, and radio frequency power supplies, matching networks, and RF instrumentation, as well as, thermal instrumentation products. Our Thin Films SBU principally serves original equipment manufacturers ("OEMs") and end customers in the semiconductor, flat panel display, solar panel, and other capital equipment markets.

Our power conversion systems refine, modify, and control the raw electrical power from a utility and convert it into power that may be customized and is predictable and repeatable. Our power conversion systems are primarily used by semiconductor, solar panel, and similar thin-film manufacturers including flat panel display, data storage, and architectural glass manufacturers.

Our thermal instrumentation products provide temperature measurement solutions for applications in which time-temperature cycles affect material properties, productivity, and yield. These products are used in rapid thermal processing, chemical vapor deposition, and other semiconductor and solar applications requiring non-contact temperature measurement.

Our network of global service support centers offer repair services, conversions, upgrades, and refurbishments to companies using our products.

Solar Energy SBU offers both a transformer-based and a transformerless advanced grid-tied PV inverter solution for residential, commercial, and utility-scale system installations. Our PV inverters are designed to convert renewable solar power, drawn from large and small scale solar arrays, into high-quality, reliable electrical power. Our Solar Energy SBU focuses on residential, commercial, and utility-scale solar projects and installations, selling primarily to distributors, engineering, procurement, and construction contractors, developers, and utility companies. Our Solar Energy revenue has seasonal variations. Installations of inverters are normally lowest during the first quarter as a result of typically poor weather and installation scheduling by our customers.

Our chief operating decision maker, who is our Chief Executive Officer, and other management personnel regularly review our performance and make resource allocation decisions by reviewing the results of our two business segments separately. Revenue and operating profit is reviewed by our chief operating decision maker, however, we have only divided inventory and property and equipment based on business segment.

Sales with respect to operating segments is as follows (in thousands):

	Three months ended March 31		
	2012 20		
Thin Films	\$60,390	\$100,099	
Solar Energy	45,397	37,553	
Total	\$105,787	\$137,652	

%

Table of Contents

ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Income from continuing operations before income taxes by operating segment is as follows (in thousands):

	Three mon	ths ended March 31,	
	2012	2011	
Thin Films	\$3,167	\$24,824	
Solar Energy	493	2,512	
Total segment operating income	3,660	27,336	
Corporate expenses	(462) (2,979)
Restructuring charges	(2,575) —	
Other income	411	663	
Income from continuing operations before income taxes	\$1,034	\$25,020	

Beginning in 2012, we are allocating "Corporate Expenses" in full to our business units. These expenses, which include certain support functions such as legal, human resources, information technology, accounting and finance, are now allocated in full to the business units in 2012 based on sales contribution. This change was implemented in an effort to provide investors with a clearer understanding of the business unit's operating performance. The remaining Corporate Expenses consist of intangible amortization from past acquisitions that management determined should not be charged to either business unit.

Segment assets consist of inventories and property and equipment, net. A summary of consolidated total assets by segment follows (in thousands):

	March 31, 2012	December 31, 2011
Thin Films	\$56,007	\$59,025
Solar Energy	65,672	62,605
Total segment assets	121,679	121,630
Unallocated corporate property and equipment	2,732	991
Corporate assets	388,079	410,757
Consolidated total assets	\$512,490	\$533,378

Unallocated corporate assets include accounts receivable, deferred income taxes and intangible assets.

Table Of Contents

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

Special Note on Forward-Looking Statements

The following discussion contains, in addition to historical information, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements in this report that are not historical information are forward-looking statements. For example, statements relating to our beliefs, expectations and plans are forward-looking statements, as are statements that certain actions, conditions or circumstances will continue. The inclusion of words such as "anticipate," "expect," "estimate," "can," "may," "continue," "enables," "plan," "intend," or "believe," as well as statements that events or circumstant occur or continue, indicate forward-looking statements. Forward-looking statements involve risks and uncertainties, which are difficult to predict and many of which are beyond our control. Therefore, actual results could differ materially and adversely from those expressed in any forward-looking statements.

For additional information regarding factors that may affect our actual financial condition, results of operations and accuracy of our forward-looking statements, see the information under the caption "Risk Factors" in Part II Item 1A of this Quarterly Report on Form 10-Q and, in our Annual Report on Form 10-K for the year ended December 31, 2011. We undertake no obligation to revise or update any forward-looking statements for any reason.

BUSINESS OVERVIEW

We design, manufacture, sell and support power conversion products that transform power into various usable forms. Our products enable manufacturing processes that use thin-film processing and etching for various products as well as grid-tied power conversion. We also supply thermal instrumentation products used for temperature control in the thin-film process. Our network of global service support centers provides local repair and field service capability in key regions.

Our power conversion products refine, modify and control the raw electrical power from a utility and converts it into power that is predictable, repeatable and customizable. Our power conversion products are primarily used by semiconductor, solar panel and similar thin-film manufacturers including flat panel display, data storage and architectural glass manufacturers.

Our thermal instrumentation products provide temperature measurement solutions for applications in which time-temperature cycles affect material properties, productivity and yield. These products are used in rapid thermal processing, chemical vapor deposition, and other semiconductor and solar applications requiring non-contact temperature measurement.

Our grid-tied power conversion products offer both an advanced transformer-based or transformerless grid-tied PV solutions for residential, commercial and utility-scale system installations. Our PV inverters are designed to convert renewable solar power, drawn from large and small scale solar arrays, into high-quality, reliable electrical power. These products are used for residential, commercial and utility-scale solar projects and installations, and are sold primarily to distributors; engineering, procurement, and construction contractors; developers; and utility companies. These product revenues have seasonal variations. Installations of inverters are normally lowest during the first quarter of the year due to less favorable weather conditions and installation scheduling by our customers.

Our network of global service support centers offer repair services, conversions, upgrades and refurbishments to businesses that use our products.

On October 15, 2010, we sold our gas flow control business, which includes the Aera® mass flow control and related product lines, to Hitachi Metals, Ltd. Consequently, the results of operations from our gas flow control business have been excluded from our discussions relating to continuing operations.

Our analysis presented below is organized to provide the information we believe will be instructive for understanding our historical performance and relevant trends going forward. This discussion should be read in conjunction with our Condensed Consolidated Financial Statements in Part I, Item 1 of this report, including the notes thereto.

Table Of Contents

Results of Operations

The following table sets forth, for the periods indicated, certain data derived from our Condensed Consolidated Statements of Operations (in thousands):

	Three months ended March 31,		
	2012	2011	
Sales	\$105,787	\$137,652	
Gross profit	39,744	62,045	
Operating expenses	39,121	37,688	
Operating income	623	24,357	
Other income, net	411	663	
Income from continuing operations before income taxes	1,034	25,020	
Provision for income taxes	268	6,254	
Income from continuing operations, net of income taxes	\$766	\$18,766	

The following table sets forth, for the periods indicated, the percentage of sales represented by certain items reflected in our Condensed Consolidated Statements of Operations:

	Three months ended March 31,		
	2012	2011	
Sales	100.0	% 100.0	%
Gross profit	37.6	% 45.1	%
Operating expenses	37.0	% 27.3	%
Operating income	0.6	% 17.8	%
Other income, net	0.4	% 0.5	%
Income from continuing operations before income taxes	1.0	% 18.3	%
Provision for income taxes	0.3	% 4.5	%
Income from continuing operations, net of income taxes	0.7	% 13.8	%
SALES			

The following tables summarize annual net sales, and percentages of net sales, by segment for the three months ended March 31, 2012 and 2011 (in thousands):

,	Three month	s ended Mar	ch	31,						
	2012	% of Total Sales		2011	% of Total Sales	l	Increase/ (Decrease)	Percent Change	
Thin Films:										
Semiconductor capital equipment market	\$38,348	36.3	%	\$45,955	33.4	%	\$(7,607)	(16.6)%
Non-semiconductor capital equipment	10,068	9.5	%	40,448	29.3	%	(30,380)	(75.1)%
Global support	11,974	11.3	%	13,696	10.0	%	(1,722)	(12.6)%
Total Thin Films	60,390	57.1	%	100,099	72.7	%	(39,709)	(39.7)%
Solar Energy	45,397	42.9	%	37,553	27.3	%	7,844		20.9	%
Total sales	\$105,787	100.0	%	\$137,652	100.0	%	\$(31,865)	(23.1)%

Table Of Contents

Total Sales

Overall, our sales decreased \$31.9 million, or 23.1%, to \$105.8 million for the three months ended March 31, 2012 from \$137.7 million for the three months ended March 31, 2011. The decrease in sales during that time period is a result of decreases in capital spending in all of our thin-film markets over the course of the past twelve months. Our semiconductor sales decreased 16.6% from the same quarter a year ago as the markets could not sustain the elevated spending levels and capacity expansion that marked the second half of 2010 and early 2011, however the more significant impact was felt in our non-semiconductor capital equipment markets, which declined 75.1% from the same quarter in 2011. Of particular note was the decreases in both the solar panel and flat panel display markets, for which more detail is provided below. Although our Solar Energy business saw an increase of 20.9% in the current quarter from the same quarter a year ago, however the increase did not offset the large decrease in Thin Films revenue. Thin Films

Results for Thin Films for the three months ended March 31, 2012 and 2011 are as follows (in thousands):

	Three months ended March 31					
	2012	2011				
Sales	\$60,390	\$100,099				
Operating Income	3,167	24,824				

Thin Films sales dipped 39.7% to \$60.4 million, or 57.1% of sales, for the three months ended March 31, 2012 versus \$100.1 million, or 72.7% of sales, for the three months ended March 31, 2011. This decline reflects the impact of the lower levels of capital investment in thin film markets described above.

In the three months ended March 31, 2012, sales in the thin film semiconductor market decreased 16.6% to \$38.3 million, or 36.3% of sales, from \$46.0 million, or 33.4% of sales for the three months ended March 31, 2011. As mentioned above, end user capital expansion has come down to more modest levels when compared to the elevated levels of 2010 and early 2011. With economic conditions and their impact on semiconductor spending still uncertain, we expect our semiconductor revenue to be flat or slightly down in the second quarter of 2012.

Sales in the thin film non-semiconductor capital equipment markets decreased 75.1% to \$10.1 million, or 9.5% of sales, for the three months ended March 31, 2012 compared to \$40.4 million, or 29.3% of sales, for the three months ended March 31, 2011. The markets that comprise the thin-film non-semiconductor capital equipment markets include solar panel, flat panel display, data storage, architectural glass and other industrial thin-film manufacturing equipment markets. Our customers in these markets are primarily global OEMs. The decrease in these markets for the three months ended March 31, 2012, as compared to the same period a year ago, was driven primarily by a worldwide oversupply of solar panels as well as cyclical lows in the flat panel display market due to the anticipation of technology changes.

Sales to customers in the thin film solar panel market decreased to \$2.0 million, or 1.9% of total sales, for the three months ended March 31, 2012 as compared to \$20.3 million, or 14.7% of total sales, for the three months ended March 31, 2011. This decrease is a result of a worldwide excess of panel capacity and inventory, particularly in the People's Republic of China (the "PRC"), as well as uncertainty in the market relating to the timing and extent of tariffs and penalties imposed by the United States government as a result of claims that Chinese manufacturers dumped PV panels on U.S. shores for below-market prices. While those U.S. anti-dumping duties are expected to be announced in May 2012, initial reports indicate that the tariffs imposed may be lower than expected. While we are optimistic this development may have a positive impact on panel sales throughout the world and perhaps lead to further capacity expansion later in the year, we expect sales to the solar panel market to be flat in the second quarter of 2012. Additionally, capital spending in the flat panel display market is at a cyclical low point as we wait for the deployment of planned next generation technology. We saw a 72.8% decline in sales to the flat panel display market this quarter as compared to the same quarter in 2011. While we are optimistic that these new technology investments will occur in the second half of this year, we expect sales to the flat panel display market to be flat to lower in the second quarter of 2012.

Our global support revenue decreased to \$12.0 million, or 11.3% of total sales, for the three months ended March 31, 2012, compared to \$13.7 million, representing 10.0% of sales, for the three months ended March 31, 2011. Although service activity levels were relatively stable in most of our geographic regions, reduced factory utilization in both the thin film solar panel and flat panel display markets negatively impacted our customers' maintenance budgets and the need for repairs and spare parts. The outlook for our service business continues to be strong, as our product offerings to include maintenance

Table Of Contents

contracts in the growing solar array market gain traction and offset drops in non-semiconductor capital market activity.

Operating income for Thin Films was \$3.2 million for the three months ended March 31, 2012, a decline of \$21.7 million from the same period of 2011. This decrease is primarily the result of the significant reduction in sales discussed above coupled with an increase in operating expenses that resulted from a change in our methodology for allocating corporate expenses to our business units. Corporate expenses, which include certain support functions such as legal, human resources, information technology, accounting and finance, are now allocated in full to the business units in 2012 based on sales contribution. This change was implemented in an effort to provide investors with a clearer understanding of the business unit's operating performance.

Solar Energy

Results for Solar Energy for the three months ended March 31, 2012 and 2011 are as follows (in thousands):

	I nree months	I hree months ended March 31,		
	2012	2011		
Sales	\$45,397	\$37,553		
Operating income	493	2.512		

Solar Energy sales were \$45.4 million, or 42.9% of sales, for the three months ended March 31, 2012 as compared to \$37.6 million, or 27.3% of sales, for the three months ended March 31, 2011.

Sales for the current quarter were up from the comparable period a year ago due to an increase in activity in both the commercial and large utility-scale projects. However, sales were down from the fourth quarter of 2011 as a result of the typical seasonality and winter weather we experience in many of our core geographic markets. Although we are experiencing project delays and pushouts caused by the macro economic conditions described above in our thin film solar panel market related to worldwide solar panel inventory, we expect continued revenue growth in the solar energy business as we introduce new products to the market and continue to gain a greater foothold in the North American market.

Operating income for Solar Energy was \$0.5 million for the three months ended March 31, 2012 as compared to \$2.5 million for the three months ended March 31, 2011. The decrease in operating income is due to a decline in gross margins resulting from changes in product mix and competitive pricing pressures coupled with a slight increase in operating expenses that resulted from the change in our methodology for allocating corporate expenses to our business units as discussed above.

Backlog

Our overall backlog was \$67.5 million at March 31, 2012 as compared to \$76.9 million at December 31, 2011. The decrease from the previous quarter is consistent with the lower levels of revenue in our non-semiconductor capital equipment markets, particularly solar panel and flat panel display. The uncertainty in those markets drives shorter lead time ordering and fewer long-term commitments.

GROSS PROFIT

Our gross profit was \$39.7 million, or 37.6% of sales, for the three months ended March 31, 2012, as compared to \$62.0 million, or 45.1% of sales for the three months ended March 31, 2011. The year-over-year decrease in terms of absolute dollars was due to the overall decline in sales in our Thin Films business in all of the markets we serve. The decrease in gross profit in terms of percent of sales was caused by an overall product mix shift to a much higher percentage of revenue from our Solar Energy product line, which has significantly lower gross margins than our Thin Film products.

Table Of Contents

OPERATING EXPENSE

The following table summarizes our operating expenses as a percentage of sales for the three months ended March 31, 2012 and 2011 (in thousands):

	Three months ended March 31,				
	2012		2011		
Research and development	\$15,115	14.3	% \$15,862	11.5	%
Selling, general, and administrative	20,059	19.0	% 20,905	15.2	%
Amortization of intangible assets	1,372	1.3	% 921	0.7	%
Restructuring charges	2,575	2.4	% —		%
Total operating expenses	\$39,121	37.0	% \$37,688	27.3	%

As a result of declines in the markets we serve in late 2011, we initiated a plan to re-align our business to be closer to our customers and improve our time to market. These initiatives included headcount reductions, facilities closures, and asset impairments. The first phase of these initiatives occurred late in 2011 and early 2012, We expect the second phase of the initiatives to occur over the next 6 to 12 months. Once complete, the two phases of the plan are expected to result in annual savings in excess of \$30.0 million.

Research and Development

The markets we serve constantly present opportunities to develop products for new or emerging applications and require technological changes driving for higher performance, lower cost, and other attributes that we expect may advance our customers' products. We believe that continued and timely development of new and differentiated products, as well as enhancements to existing products to support customer requirements, are critical for us to compete in the markets we serve. Accordingly, we devote significant personnel and financial resources to the development of new products and the enhancement of existing products, and we expect these investments to continue. All of our research and development costs have been expensed as incurred.

Research and development expenses for the three months ended March 31, 2012 were \$15.1 million, or 14.3% of sales, as compared to \$15.9 million, or 11.5% of sales, for the three months ended March 31, 2011. The decrease in research and development expenses of \$0.7 million, or 4.7%, in the three months ended March 31, 2012 as compared to the same period in 2011 was driven primarily by decreased personnel costs resulting from headcount reductions that occurred in late 2011 under our restructuring plan.

Selling, General and Administrative

Our selling expenses support domestic and international sales and marketing activities that include personnel, trade shows, advertising, third-party sales representative commissions, and other selling and marketing activities. Our general and administrative expenses support our worldwide corporate, legal, tax, financial, governance, administrative, information systems, and human resource functions in addition to our general management. Selling general and administrative ("SG&A") expenses decreased \$0.8 million in the three months ended March 31, 2012 as compared to the same period in 2011. The decrease is primarily due to headcount reductions as part of our restructuring plan coupled with reductions in purchased services including legal expenses.

Amortization Expense

Amortization expense was \$1.4 million for the three months ended March 31, 2012, compared to \$0.9 million for the same period ending March 31, 2011. The increase of \$0.5 million in 2012 is due to in process research and development projects that were placed in service throughout 2011. These projects were in process at the acquisition date of PV Powered and were recorded as non-amortizing intangible assets at the acquisition date. As the projects are completed they begin amortizing over their estimated useful lives.

Restructuring Charges

In September 2011, we announced several initiatives designed to realign our manufacturing and research and development activities in order to foster growth and enhance profitability. These initiatives are designed to align research and

Table Of Contents

development activities with the location of our customers and reduce product costs. As part of this plan, we have reduced our global headcount by approximately 210 people or 12.6% of our total headcount, started the consolidation of our facilities by terminating a lease and exiting several additional leases, and recording impairments for assets no longer in use due to the restructuring of our business. These activities resulted in \$2.6 million of charges in the three months ended March 31, 2012. Over the next 6 to 12 months, we will continue to evaluate our cost structure as we close facilities and relocate certain functions. We expect these initiatives to result in additional charges of approximately \$2.0 million to \$6.0 million.

Other Income, net

Other income, net consists primarily of interest income and expense, foreign exchange gains and losses, and other miscellaneous items.

Other income, net was \$0.4 million for the three months ended March 31, 2012 as compared to \$0.7 million in the same period of 2011. The decrease in 2012 as compared to 2011 was due to foreign exchange losses recognized in the first quarter of 2012 on transactions denominated in a currency that is not the functional currency of the local entity. Provision for Income Taxes

We recorded an income tax provision from continuing operations for the three months ended March 31, 2012 of \$0.3 million compared to \$6.3 million for the three months ended March 31, 2011, resulting in effective tax rates of 25.9% and 25.0%, respectively.

Our future effective income tax rate depends on various factors, such as changes in tax laws, regulations, accounting principles, or interpretations thereof and the geographic composition of our pre-tax income. We carefully monitor these factors and adjust our effective income tax rate accordingly.

Discontinued Operations

On October 15, 2010, we completed the sale of our gas flow control business, which includes the Aera® mass flow control and related product lines to Hitachi Metals, Ltd., for \$43.3 million. Assets and liabilities sold include, without limitation, inventory, real property in Hachioji, Japan, equipment, certain contracts, intellectual property rights related to the gas flow control business, and certain warranty liability obligations. The results of continuing operations were reduced by the revenue and costs associated with the gas flow control business which are included in the Income from discontinued operations, net of income taxes, in our Condensed Consolidated Statements of Operations.

Impact of Inflation

In recent years, inflation has not had a significant impact on our operations. However, we continuously monitor operating price increases, particularly in connection with the supply of component parts used in our manufacturing process. To the extent permitted by competition, we pass increased costs on to our customers by increasing sales prices over time. Sales price increases, however, were not significant in any of the years presented herein.

Liquidity and Capital Resources

LIQUIDITY

We believe that adequate liquidity and cash generation is important to the execution of our strategic initiatives. Our ability to fund our operations, acquisitions, capital expenditures, and product development efforts may depend on our ability to generate cash from operating activities which is subject to future operating performance, as well as general economic, financial, competitive, legislative, regulatory, and other conditions, some of which may be beyond our control. Our primary sources of liquidity are our available cash, investments, and cash generated from current operations. We currently have no line of credit or other external sources of liquidity although we may seek external sources of liquidity from time to time.

At March 31, 2012, we had \$150.7 million in cash, cash equivalents, and marketable securities. We believe that our current cash levels and our cash flows from future operations will be adequate to meet anticipated working capital needs, anticipated levels of capital expenditures, and contractual obligations for the next twelve months.

Table Of Contents

CASH FLOWS

A summary of our cash provided by and used in operating, investing and financing, activities is as follows (in thousands):

	Three months ended March 31,		
	2012	2011	
Net cash provided by operating activities	\$34,691	\$2,715	
Net cash used in investing activities	(2,892) (2,390	
Net cash provided by (used in) financing activities	(22,110) 1,494	
Effect of currency translation on cash	(1,910) (315	
Increase in cash and cash equivalents	7,779	1,504	
Cash and cash equivalents, beginning of the period	117,639	130,914	
Cash and cash equivalents, end of the period	\$125,418	\$132,418	
2012 CASH FLOWS COMPARED TO 2011			

Net cash provided by operating activities

Net cash provided by operating activities for the three months ended March 31, 2012 was \$34.7 million, compared to \$2.7 million for the same period ended March 31, 2011. The increase of \$32.0 million in net cash flows from operating activities is primarily due to the collection of accounts receivable in the current quarter coupled with a smaller increase in inventory levels in the first quarter of 2012 as compared to 2011.

Net cash provided by investing activities

Net cash used in investing activities for the three months ended March 31, 2012 was \$2.9 million. an increase in cash used of \$0.5 million from the prior year. The additional cash used for investing activities in 2012 is the result of an increase in the purchases of marketable securities in 2012 due to higher levels of cash available for investment. Investments in marketable securities generated \$0.2 million in 2012 as compared to \$2.0 million in 2011. Capital expenditures in 2012 were down \$1.3 million compared to 2011. Prior year expenditures included the expansion of production capacity for solar inverters and additions for test equipment related to research and development activities. We expect to fund future capital expenditures with cash generated from operations. Net cash provided by (used in) financing activities

Net cash used in financing activities in the three months ended March 31, 2012 was \$22.1 million, a \$23.6 million change from the cash provided by financing activities of \$1.5 million in the same period of 2011. In November 2011 we announced a \$75.0 million share repurchase program, of which \$21.9 million of cash was used to repurchase 2.0 million shares in the first quarter of 2012. We expect the repurchase program to continue through November of 2012, although there is no minimum number of shares that must be repurchased and the program may be suspended or discontinued at any time. The exercise of stock options provided \$0.1 million of cash in 2012 as compared to \$1.6 million in 2011.

Table Of Contents

Effect of currency translation on cash

The effect of foreign currency translations on cash changed \$1.6 million to a \$1.9 million negative impact for the three months ended March 31, 2012 compared to a \$0.3 million negative impact for the three months ended March 31, 2011

The functional currencies of our worldwide operations primarily include U.S. dollar ("USD"), Japanese Yen ("JPY"), Chinese Yuan ("CNY"), New Taiwan Dollar ("TWD"), South Korean Won ("KRW"), British Pound ("GBP") and Euro ("EUR"). Our purchasing and sales activities are primarily denominated in USD, JPY, CNY and EUR. The change in these key currency rates during the three months ended March 31, 2012 and 2011 are as follows:

		Three months e	Three months ended March 31,		
From	To	2012		2011	
CNY	USD	0.2	%	0.8	%
EUR	USD	3.2	%	6.3	%
JPY	USD	(5.6)%	(1.8)%
KRW	USD	2.6	%	2.7	%
TWD	USD	2.9	%	(0.8))%
GBP	USD	3.4	%	3.6	%

Off Balance Sheet Arrangements

We have no off-balance sheet arrangements or variable interest entities.

Critical Accounting Policies and Estimates

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires us to make judgments, assumptions and estimates that affect the amounts reported in the Condensed Consolidated Financial Statements and accompanying notes. Note 1 to the Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2011 describes the significant accounting policies and methods used in the preparation of our Consolidated Financial Statements. Our critical accounting estimates, discussed in the Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2011, include estimates for allowances for doubtful accounts, determining useful lives for depreciation and amortization, the valuation of assets and liabilities acquired in business combinations, assessing the need for impairment charges for identifiable intangible assets and goodwill, establishing warranty reserves, accounting for income taxes, and assessing excess and obsolete inventories. Such accounting policies and estimates require significant judgments and assumptions to be used in the preparation of the Condensed Consolidated Financial Statements and actual results could differ materially from the amounts reported based on variability in factors affecting these estimates.

Our management discusses the development and selection of our critical accounting policies and estimates with the Audit Committee of our Board of Directors at least annually. Our management also internally discusses the adoption of new accounting policies or changes to existing policies at interim dates, as it deems necessary or appropriate. ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our market risk exposure relates to changes in interest rates in our investment portfolio. We generally place our investments with high-credit quality issuers and by policy are averse to principal loss and seek to protect and preserve our invested funds by limiting default risk, market risk, and reinvestment risk. As of March 31, 2012, our investments consisted primarily of commercial paper, certificates of deposit, corporate bonds/notes, agency bonds/notes and institutional money markets, all with maturity of less than 2 years.

As a measurement of the sensitivity of our portfolio and assuming that our investment portfolio balances remain constant, a hypothetical decrease of 100 basis points (1%) in interest rates would decrease annual pre-tax earnings by approximately \$0.3 million.

Table Of Contents

Foreign Currency Exchange Rate Risk

We are impacted by changes in foreign currency exchange rates through sales and purchasing transactions when we sell products and purchase materials in currencies different from the currency in which product and manufacturing costs were incurred. Our purchasing and sales activities are primarily denominated in the USD, JPY, CNY and EUR. As these currencies fluctuate against each other, and other currencies, we are exposed to foreign currency exchange rate risk on sales, purchasing transactions and labor.

Our reported financial results of operations, including the reported value of our assets and liabilities, are also impacted by changes in foreign currency exchange rates. Assets and liabilities of many of our subsidiaries outside the U.S. are translated at period end rates of exchange for each reporting period. Operating results and cash flow statements are translated at weighted-average rates of exchange during each reporting period. Although these translation changes have no immediate cash impact, the translation changes may impact future borrowing capacity, and overall value of our net assets.

From time to time, we enter into foreign currency exchange rate contracts to hedge against changes in foreign currency exchange rates on assets and liabilities expected to be settled at a future date. Market risk arises from the potential adverse effects on the value of derivative instruments that result from a change in foreign currency exchange rates. We minimize our market risk applicable to foreign currency exchange rate contracts by establishing and monitoring parameters that limit the types and degree of our derivative contract instruments. We enter into derivative contract instruments for risk management purposes only. We do not enter into or issue derivatives for trading or speculative purposes.

Currency exchange rates vary daily and often one currency strengthens against the USD while another currency weakens. Because of the complex interrelationship of the worldwide supply chains and distribution channels, it is difficult to quantify the impact of a change in one or more particular exchange rates.

See the "Risk Factors" set forth in Part I, Item 1A of our Annual Report on Form 10-K for more information about the market risks to which we are exposed. There have been no material changes in our exposure to market risk from December 31, 2011.

ITEM 4 CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We have established disclosure controls and procedures, which are designed to ensure that information required to be disclosed in reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Act is accumulated and communicated to management, including our Principal Executive Officer (Garry Rogerson, Chief Executive Officer) and Principal Financial Officer (Danny C. Herron, Executive Vice President & Chief Financial Officer), as appropriate, to allow timely decisions regarding required disclosures.

As of the end of the period covered by this report, we conducted an evaluation, with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the disclosure controls and procedures pursuant to the Exchange Act Rule 13a-15(b). Based upon this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2012. The conclusions of the Chief Executive Officer and Chief Financial Officer from this evaluation were communicated to the Audit Committee. We intend to continue to review and document our disclosure controls and procedures, including our internal controls and procedures for financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our business. Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fiscal quarter covered by this Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table Of Contents

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are involved in disputes and legal actions arising in the normal course of our business.

There have been no material developments in legal proceedings in which we are involved during the three months ended March 31, 2012. For a description of previously reported legal proceedings refer to Part I, Item 3, "Legal Proceedings" of our Annual Report on Form 10-K for the year ended December 31, 2011.

ITEM 1A. RISK FACTORS

Item 1A, "Risk Factors," of our Annual Report on Form 10-K for the year ended December 31, 2011 describes some of the risks and uncertainties associated with our business. The risk factors set forth below update such disclosures. Other factors may also exist that we cannot anticipate or that we currently do not consider to be significant based on information that is currently available. These risks and uncertainties have the potential to materially affect our business, financial condition, results of operations, cash flows and future results. Such risks and uncertainties also may impact the accuracy of forward-looking statements included in this Form 10-Q and other reports we file with the Securities and Exchange Commission.

We are exposed to risks as a result of ongoing changes specific to the solar inverter industry.

A significant portion of our business is in the emerging solar inverter market, which, in addition to the general industry changes described above in the risk factor "The industries in which we compete are subject to volatile and unpredictable cycles," is also characterized by ongoing changes particular to the solar inverter industry. Our business is subject to changes in technology or demand for solar products arising from, among other things, adoption of our inverter products by our customers, compatibility of our solar inverter technology with our customers' products or certain solar panel providers, customers' and end-users' access to affordable financial capital, the cost and performance of solar technology compared to other energy sources, the adequacy of or changes in government energy policies, including the availability and amount of government incentives for solar power (such as feed-in tariffs and tax credits), the continuation of renewable portfolio standards, and the extent of investment or participation in solar by utilities or other companies that generate, transmit, or distribute power to end users. The current debt crisis in Europe and the resulting economic uncertainty and instability in the region could result in limited access to capital for our customers or changes to government incentives for renewable energy which could cause the delay or cancellation of current projects in the solar industry. Moreover, as European solar incentives continue to decline and the Euro devalues, European competitors will likely compete more aggressively in the United States against us. There is also increased market volatility as the size of utility scale solar projects is increasing to hundreds of megawatts of capacity. Such large-scale solar projects require significant financial resources on our part should we be selected as the supplier for solar inverters. We are beginning to see requirements in the solar industry for performance guarantees related to solar inverters and associated liquidated damages provisions. This could result in financial exposure for our business if our solar inverters do not meet delivery, reliability or uptime requirements. Lastly, customers using our solar inverters are beginning to evaluate multi-year service agreements from us for onsite maintenance and support of our inverters and even the solar site. These agreements, however, are subject to annual renewal and may not be renewed by the customers.

If we do not successfully manage the risks resulting from these ongoing changes occurring in the solar industry, we may miss out on substantial opportunities for revenue and our business, financial condition, and results of operations could be materially and adversely affected.

Table Of Contents

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS Share Repurchases

In November 2011, the Board of Directors authorized a program to repurchase up to \$75 million of our common stock over a twelve month period. There is no minimum number of shares to be repurchased under the plan and it may be suspended or discontinued at any time. Share repurchases during the three months ended March 31, 2012 are as follows (in thousands, except for average price per share):

				Maxilliulli
			Total Number of	Number (or
Period			Shares Purchased	Approximate
	Total Number of	Average Price	as Part of	Dollar Value) of
	Shares Purchased	Paid per Share	Publicly	Shares that May
			Announced Plans	Yet Be Purchased
			or Programs	Under the Plan or
				Program
January 1, 2012 to January 31, 2012	1,019	\$10.92	1,019	\$45,971
February 1, 2012 to February 29, 2012	590	\$10.95	590	\$39,513
March 1, 2012 to March 31, 2012	368	\$11.78	368	\$35,173
Total	1,977	\$11.09	1,977	
THE LA DEEL LIVE HE LIBOUR SELVED SE	OT TO TOTAL			

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

- Certification of the Chief Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- Certification of the Chief Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification of the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

29

Maximum

Table Of Contents

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ADVANCED ENERGY INDUSTRIES, INC.

Dated: May 8, 2012 /s/ Danny C. Herron

Danny C. Herron

Executive Vice President and Chief Financial Officer

Table Of Contents

INDEX TO EXHIBITS

- Certification of the Chief Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- Certification of the Chief Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- Certification of the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification of the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.