

ADVANCED ENERGY INDUSTRIES INC  
Form 10-Q  
August 06, 2013  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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FORM 10-Q

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

For the quarterly period ended June 30, 2013

or

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

For the transition period from            to            .

Commission file number: 000-26966  
ADVANCED ENERGY INDUSTRIES, INC.  
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	84-0846841 (I.R.S. Employer Identification No.)
1625 Sharp Point Drive, Fort Collins, CO (Address of principal executive offices)	80525 (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  No

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

Indicate by check mark 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):

Large accelerated filer <input type="checkbox"/>	Accelerated filer <input checked="" type="checkbox"/>	Non-accelerated filer <input type="checkbox"/>	Smaller reporting company <input type="checkbox"/>
(Do not check if a 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

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As of July 31, 2013 there were 39,802,087 shares of the registrant's Common Stock, par value \$0.001 per share, outstanding.

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## 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)

	June 30, 2013	December 31, 2012
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$87,062	\$146,564
Marketable securities	12,065	25,683
Accounts receivable, net of allowances of \$4,160 and \$4,589, respectively	132,608	83,914
Inventories, net of reserves of \$16,807 and \$14,629, respectively	102,182	81,482
Deferred income tax assets	19,449	19,477
Income taxes receivable	6,121	4,315
Other current assets	14,389	9,075
Total current assets	373,876	370,510
Property and equipment, net	40,773	39,523
<b>OTHER ASSETS:</b>		
Deposits and other	7,635	7,529
Goodwill	144,658	60,391
Other intangible assets, net	33,971	46,209
Deferred income tax assets	13,941	13,998
Total assets	\$614,854	\$538,160
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$66,402	\$41,044
Income taxes payable	2,883	11,029
Accrued payroll and employee benefits	10,660	11,675
Accrued warranty expense	13,278	7,419
Other accrued expenses	25,155	15,399
Customer deposits	5,454	2,080
Notes payable to banks	13,434	—
Total current liabilities	137,266	88,646
<b>LONG-TERM LIABILITIES:</b>		
Deferred income tax liabilities	16,954	16,832
Uncertain tax positions	13,669	13,669
Accrued warranty expense	7,141	7,378
Other long-term liabilities	38,322	24,004
Total liabilities	213,352	150,529
Commitments and contingencies (Note 17)		
<b>STOCKHOLDERS' EQUITY:</b>		
Preferred stock, \$0.001 par value, 1,000 shares authorized, none issued and outstanding	—	—
Common stock, \$0.001 par value, 70,000 shares authorized; 39,700 and 37,991 issued and outstanding, respectively	40	38
Additional paid-in capital	232,873	212,520
Retained earnings	142,394	145,348
Accumulated other comprehensive income	26,195	29,725

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Total stockholders' equity	401,502	387,631
Total liabilities and stockholders' equity	\$614,854	\$538,160

\* Amounts as of June 30, 2013 are unaudited. Amounts as of December 31, 2012 are derived from the December 31, 2012 audited Consolidated Financial Statements.

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

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ADVANCED ENERGY INDUSTRIES, INC.  
Condensed Consolidated Statements of Operations (Unaudited)  
(In thousands, except per share amounts)

	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2013	2012	2013	2012
SALES	\$139,711	\$115,658	\$251,525	\$221,445
COST OF SALES	86,452	71,929	156,427	137,972
GROSS PROFIT	53,259	43,729	95,098	83,473
OPERATING EXPENSES:				
Research and development	15,740	14,502	29,993	29,617
Selling, general and administrative	22,910	16,706	40,564	36,765
Amortization of intangible assets	1,975	1,351	4,188	2,723
Restructuring charges (benefit) and asset impairment	24,206	(144)	24,206	2,431
Total operating expenses	64,831	32,415	98,951	71,536
OPERATING INCOME (LOSS)	(11,572)	11,314	(3,853)	11,937
OTHER INCOME (EXPENSE), NET	(330)	1,775	(533)	2,186
Income (loss) from continuing operations before income taxes	(11,902)	13,089	(4,386)	14,123
Provision (benefit) for income taxes	(2,120)	4,288	(1,430)	4,556
INCOME (LOSS) FROM CONTINUING OPERATIONS, NET OF INCOME TAXES	(9,782)	8,801	(2,956)	9,567
Income from discontinued operations, net of income taxes	—	127	—	430
NET INCOME (LOSS)	\$(9,782)	\$8,928	\$(2,956)	\$9,997
Basic weighted-average common shares outstanding	39,453	38,974	39,114	39,877
Diluted weighted-average common shares outstanding	40,150	39,583	39,899	40,460
EARNINGS PER SHARE:				
CONTINUING OPERATIONS:				
BASIC EARNINGS (LOSS) PER SHARE	\$(0.25)	\$0.23	\$(0.08)	\$0.24
DILUTED EARNINGS (LOSS) PER SHARE	\$(0.24)	\$0.22	\$(0.07)	\$0.24
DISCONTINUED OPERATIONS				
BASIC EARNINGS PER SHARE	\$0.00	\$0.00	\$0.00	\$0.01
DILUTED EARNINGS PER SHARE	\$0.00	\$0.00	\$0.00	\$0.01
NET INCOME:				
BASIC EARNINGS (LOSS) PER SHARE	\$(0.25)	\$0.23	\$(0.08)	\$0.25
DILUTED EARNINGS (LOSS) PER SHARE	\$(0.24)	\$0.23	\$(0.07)	\$0.25

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

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## ADVANCED ENERGY INDUSTRIES, INC.

## Condensed Consolidated Statements of Comprehensive Income (Unaudited)

(In thousands)

	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2013	2012	2013	2012
Net income (loss)	\$(9,782 )	\$8,928	\$(2,956 )	\$9,997
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustment	(690 )	929	(3,524 )	(869 )
Unrealized gains (losses) on marketable securities	—	(5 )	(7 )	14
Comprehensive income (loss)	\$(10,472 )	\$9,852	\$(6,487 )	\$9,142

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



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ADVANCED ENERGY INDUSTRIES, INC.  
Condensed Consolidated Statements of Cash Flows (Unaudited)  
(In thousands)

	Six Months Ended June 30,	
	2013	2012
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net income (loss)	\$(2,956	) \$9,997
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	10,592	8,618
Stock-based compensation expense	5,204	7,237
Provision (benefit) for deferred income taxes	4,117	(614
Restructuring charges and asset impairment	24,206	2,431
Net gain (loss) on sale or disposal of assets	312	(1,223
Changes in operating assets and liabilities:		
Accounts receivable	(39,601	) 30,990
Inventories	(3,561	) (522
Other current assets	66	898
Accounts payable	8,243	(2,172
Other current liabilities and accrued expenses	(2,224	) (547
Income taxes	(14,410	) 9,710
Net cash provided by (used in) operating activities	(10,012	) 64,803
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchases of marketable securities	(13,056	) (13,767
Proceeds from sale of marketable securities	26,613	10,566
Proceeds from the sale of assets	—	2,200
Purchases of property and equipment	(3,825	) (4,209
Acquisitions, net of cash acquired	(77,211	) —
Net cash used in investing activities	(67,479	) (5,210
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Borrowings from lines of credit	1,555	—
Purchase and retirement of common stock	—	(57,117
Proceeds from exercise of stock options	16,937	1,635
Excess tax from stock-based compensation deduction	(678	) (476
Other financing activities	(52	) (47
Net cash provided by (used in) financing activities	17,762	(56,005
EFFECT OF CURRENCY TRANSLATION ON CASH	227	(961
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(59,502	) 2,627
CASH AND CASH EQUIVALENTS, beginning of period	146,564	117,639
CASH AND CASH EQUIVALENTS, end of period	\$87,062	\$120,266
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>		
Cash paid for interest	\$26	\$15
Cash paid for income taxes	13,895	2,555
Cash received for refunds of income taxes	2,929	7,334
Cash held in banks outside the United States of America	30,739	30,249

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



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ADVANCED ENERGY INDUSTRIES, INC.  
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. BASIS OF PRESENTATION

Advanced Energy Industries, Inc., a Delaware corporation, and its wholly-owned subsidiaries ("we," "us," "our," "Advanced Energy," or the "Company") 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, thin film renewables, 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 primarily commercial, and utility-scale solar projects and installations. Our network of global service support centers provides a recurring revenue opportunity as we 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 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 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 the Company at June 30, 2013, and the results of our operations and cash flows for the three and six months ended June 30, 2013 and 2012.

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, 2012 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, 2012.

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 issuance of an Accounting Standards Update ("ASU"). Unless otherwise discussed, we believe that the impact

of recently issued guidance,

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 &amp; DISPOSITION

## Acquisition

## Solvix SA

On November 8, 2012, we acquired Solvix SA ("Solvix"), a privately-held Switzerland based company, pursuant to a stock purchase agreement dated November 8, 2012 between AEI International Holdings, CV ("AEI CV"), a wholly-owned subsidiary of Advanced Energy incorporated in the Netherlands, and CPA Group SA ("CPA Group"), a privately held Switzerland company. Pursuant to the stock purchase agreement, AEI CV purchased 100% of the outstanding stock of Solvix.

We acquired all of the outstanding Solvix common stock for total consideration with a fair value of approximately \$21.2 million consisting of cash payments totaling \$16.0 million, net of cash acquired, and contingent consideration payable to the former shareholders of Solvix. The additional cash consideration of up to \$7.9 million is payable to CPA Group if certain milestone targets are met during the year ending December 31, 2013 and certain financial targets are met in the three years ended December 31, 2015. The estimated fair value of this contingent consideration is approximately \$5.3 million as of November 8, 2012, of which the remaining balance of \$2.0 million is included in Other accrued expenses and \$2.3 million is included in Other long-term liabilities on the Condensed Consolidated Balance Sheet.

Solvix is a manufacturer of power supplies for the surface treatment and thin films industry. Solvix manufactures products that bring plasma-based sputtering and cathodic arc deposition applications to Advanced Energy's existing product portfolio and is included in our Thin Film business unit. Solvix has approximately 10 employees and had revenues of \$5.2 million in its fiscal year ended September 30, 2012.

The Solvix product line will continue to be manufactured in Switzerland under a contract manufacturing agreement with CPA Group until production is moved to our Shenzhen facility in 2013.

The components of the fair value of the total consideration transferred for the Solvix acquisition are as follows (in thousands):

Cash paid to owners	\$16,673	
Contingent consideration	5,253	
Cash acquired	(680	)
Total fair value of consideration transferred	\$21,246	

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes estimated fair values of the assets acquired and liabilities assumed as of November 8, 2012 (in thousands):

Cash	\$680	
Accounts receivable	1,074	
Inventories	57	
Other receivables	32	
Other current assets	46	
Property and equipment	43	
Accounts payable	(390)	)
Accrued payroll and employee benefits	(186)	)
Other accrued expenses	(159)	)
Customer deposits	(38)	)
Deferred tax liabilities	(1,628)	)
	(469)	)
Amortizable intangible assets:		
Trademarks	106	
Technology	2,723	
Customer relationships	5,398	
Total amortizable intangible assets	8,227	
Total identifiable net assets	7,758	
Goodwill	13,488	
Total fair value of consideration transferred	\$21,246	

A summary of the intangible assets acquired, amortization method and estimated useful lives as of November 8, 2012 follows (in thousands, except useful life):

	Amount	Amortization Method	Useful Life
Trademarks	\$106	Straight-line	3
Technology	2,723	Straight-line	9
Customer relationships - other	755	Straight-line	7
Customer relationships - design	4,643	Straight-line	12
	\$8,227		

Goodwill and intangible assets are recorded in the functional currency of the entity and are subject to changes due to translation at each balance sheet date.

The cost of the acquisition may increase or decrease based on the final amount payable to the former owner of Solvix related to the financial targets to be met during the three years ending December 31, 2015. Advanced Energy is in the process of finalizing valuations of other intangibles, estimates of the fair value of liabilities associated with the acquisition and deferred taxes and expects to complete the acquisition accounting and required disclosures prior to December 31, 2013.

Refusol Holding

On April 8, 2013, we acquired all the outstanding shares of Refusol Holding GmbH pursuant to a Sale and Purchase Agreement (the "Agreement") between AEI Holdings, GmbH (formerly Blitz S13-103, GmbH) ("AEI Holdings"), an indirect wholly-owned subsidiary of Advanced Energy Industries, Inc. and Jolaos Verwaltungs GmbH ("Jolaos") and Prettl Beteiligungs Holding GmbH. Refusol Holding GmbH ("Refusol Holding") owns all of the shares of Refusol GmbH and its subsidiaries (collectively and together with Refusol Holding, "Refusol"). Refusol develops, manufactures, distributes and services photovoltaic inverters.

All of the outstanding shares of Refusol Holding were acquired for total consideration of approximately \$89.1 million, consisting of a cash payment of \$77.2 million, net of cash acquired and a working capital reduction and assumption of debt totaling \$11.9 million. The agreement calls for additional cash consideration if certain stretch financial targets are

met by our Solar Energy

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

business unit and Refusol, on a combined basis, at the end of the twelve (12) calendar months following April 1, 2013. The contingent consideration has no estimated fair value as of April 8, 2013 based on management's estimates of operating income for the Solar Energy business unit for the specified period. The preliminary base price is subject to a post-closing adjustment based on confirmation of the financial statements of Refusol effective as of the closing date. Refusol develops three-phase string inverters for commercial customers across Europe and Asia. Its three-phase string inverter offerings range in size from 8kW to 24kW broadening the range of solar inverter products offered by Advanced Energy. Refusol is included in our Solar Energy business unit. Refusol had revenues of \$170.5 million in its fiscal year ended December 31, 2012.

The components of the fair value of the total consideration transferred for the Refusol acquisition are as follows (in thousands):

Cash paid to owners	\$81,387	
Debt assumed	11,873	
Working capital adjustment	(2,340)	)
Cash acquired	(1,836)	)
Total fair value of consideration transferred	\$89,084	

The following table summarizes estimated fair values of the assets acquired and liabilities assumed as of April 8, 2013 (in thousands):

Cash	\$1,836	
Accounts receivable	10,705	
Inventories	17,690	
Other current assets	7,028	
Property and equipment	4,689	
Other long-term assets	130	
Current liabilities	(21,257)	)
Long-term liabilities	(23,085)	)
Deferred tax liabilities	(1,732)	)
	(3,996)	)
Amortizable intangible assets:		
Trademarks	1,300	
Technology	5,400	
Customer relationships	3,200	
Total amortizable intangible assets	9,900	
Total identifiable net assets	5,904	
Goodwill	83,180	
Total fair value of consideration transferred	\$89,084	

A summary of the intangible assets acquired, amortization method and estimated useful lives as of April 8, 2013 follows (in thousands, except useful life):

	Amount	Amortization Method	Useful Life
Trademarks	\$1,300	Straight-line	1.5
Technology	5,400	Straight-line	5
Customer relationships	3,200	Straight-line	5
	\$9,900		



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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Goodwill and intangible assets are recorded in the functional currency of the entity and are subject to changes due to translation at each balance sheet date. The goodwill associated with the acquisition is the result of expected synergies and expansion of the technology into additional markets that we already serve.

The cost of the acquisition may increase or decrease based on the final amount payable to the former owner of Refusol related to the financial targets to be met during the twelve month period subsequent to April 1, 2013. Advanced Energy is in the process of finalizing valuations of other intangibles, property, plant and equipment, estimates of the fair value of liabilities associated with the acquisition and deferred taxes.

The results of Refusol operations are included in our Condensed Consolidated Statements of Operations beginning April 8, 2013. For the period ended June 30, 2013, net sales of approximately \$19.8 million and operating loss of \$5.4 million attributable to Refusol were included in the consolidated results of operations. Refusol's results of operations included restructuring charges of \$3.8 million and amortization of purchased intangible assets of \$0.7 million.

Pro Forma Results for Refusol Acquisition

The following unaudited pro forma financial information presents the combined results of operations of Advanced Energy and Refusol as if the acquisition had occurred as of January 1, 2012. The pro forma financial information is presented for informational purposes and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at January 1, 2012. The unaudited pro forma financial information for the three and six months ended June 30, 2012 includes the historical results of Advanced Energy for the three and six months ended June 30, 2012 and the historical results of Refusol for the same periods.

The unaudited pro forma results for all periods presented include amortization charges for acquired intangible assets and related tax effects. These pro forma results consider the sale of the gas flow control business and related product lines as discontinued operations. The unaudited pro forma results follow (in thousands, except per share data):

	(Unaudited)			
	Three Months	Three Months	Six Months	Six Months
	Ended June 30,	Ended June 30,	Ended June 30,	Ended June 30,
	2013	2012	2013	2012
Sales	\$140,154	\$166,544	\$271,608	\$295,015
Net income (loss)	(10,414	) 8,631	(7,662	) 9,433
Earnings (loss) per share:				
Basic	\$(0.26	) \$0.22	\$(0.20	) \$0.24
Diluted	\$(0.26	) \$0.22	\$(0.19	) \$0.23

Disposition

On October 15, 2010, we completed the sale of our gas flow control business, which included the Aera<sup>®</sup> mass flow control and related product lines to Hitachi Metals, Ltd. ("Hitachi"), for approximately \$43.3 million. Assets and liabilities sold included, 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 pursuant to which we provided 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. As of May 31, 2012, we ceased providing contract manufacturing services to Hitachi and completed the sale of certain fixed assets related to that manufacturing. The sale of these assets resulted in a \$1.9 million gain, which is recorded in Other income (expense), net in our Condensed Consolidated Statements of Operations. As of June 30, 2012, all manufacturing activities and relationships with Hitachi related to the previously owned gas flow control business have ended. We do not anticipate any additional activity with Hitachi in respect of these assets that would materially impact our financial statements in the future.

In accordance with authoritative accounting guidance for reporting discontinued operations, for the periods reported in this Form 10-Q, 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.

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

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Three Months Ended June 30, 2012	Six Months Ended June 30, 2012	
Sales	\$4,383	\$8,959	
Cost of sales	4,044	9,189	
Gross profit (loss)	339	(230	)
Operating expenses:			
Research and development	—	—	
Selling, general, and administrative	43	88	
Total operating expenses	43	88	
Operating income (loss) from discontinued operations	296	(318	)
Other income (expenses)	(142	) 881	
Income from discontinued operations before income taxes	154	563	
Provision for income taxes	27	133	
Income from discontinued operations, net of income taxes	\$127	\$430	

## 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 June 30,		Six Months Ended June 30,		
	2013	2012	2013	2012	
Income (loss) from continuing operations before income taxes	\$(11,902	) \$13,089	\$(4,386	) \$14,123	
Provision (benefit) for income taxes	(2,120	) 4,288	(1,430	) 4,556	
Effective tax rate	17.8	% 32.8	% 32.6	% 32.3	%

The provision for income taxes is based on the current estimate of the annual effective tax rate adjusted to reflect the impact of discrete items. The tax expense for both the three and six months ended June 30, 2013, reflects a benefit primarily attributable to restructuring expenses.

Our policy is to classify accrued interest and penalties related to unrecognized tax benefits in our income tax provision. For the three and six months ended June 30, 2013 and 2012, the amount of interest and penalties accrued related to our unrecognized tax benefits was not significant.

## NOTE 4. EARNINGS PER SHARE FOR CONTINUING OPERATIONS

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 (e.g., stock options and restricted stock units) had been converted to common shares, and if such assumed conversion is dilutive.

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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 (in thousands, except per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Income (loss) from continuing operations, net of income taxes	\$ (9,782 )	\$ 8,801	\$ (2,956 )	\$ 9,567
Basic weighted-average common shares outstanding	39,453	38,974	39,114	39,877
Assumed exercise of dilutive stock options and restricted stock units	697	609	785	583
Diluted weighted-average common shares outstanding	40,150	39,583	39,899	40,460
Income from continuing operations:				
Basic earnings (loss) per share	\$ (0.25 )	\$ 0.23	\$ (0.08 )	\$ 0.24
Diluted earnings (loss) per share	\$ (0.24 )	\$ 0.22	\$ (0.07 )	\$ 0.24

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Stock options	695	4,875	780	5,303
Share Repurchases				

In October 2012, our Board of Directors authorized a program to repurchase up to \$25.0 million of our stock over a twelve-month period. Under this program, during the three and six months ended June 30, 2013, we have not yet repurchased any 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):

	June 30, 2013		December 31, 2012	
	Cost	Fair Value	Cost	Fair Value
Commercial paper	\$—	\$—	\$749	\$749
Certificates of deposit	11,787	11,784	12,498	12,498
Corporate bonds/notes	—	—	11,274	11,253
Municipal bonds/notes	281	281	285	285
Agency bonds/notes	—	—	900	898
Total marketable securities	\$12,068	\$12,065	\$25,706	\$25,683

The maturities of our marketable securities available for sale as of June 30, 2013 are as follows:

	Earliest	to	Latest
Certificates of deposit	8/6/2013		5/8/2015
Municipal bonds/notes	9/1/2013		9/1/2013

The value and liquidity of the marketable securities we hold are affected by market conditions, as well as the ability of the issuers of such securities 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.

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of June 30, 2013, 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 and six months ended June 30, 2013 and 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. These forward contracts are typically for one month periods. At June 30, 2013 and December 31, 2012 we had outstanding Euro, Swiss Franc, and Canadian Dollar forward contracts.

The notional amount of foreign currency exchange contracts at June 30, 2013 and 2012 was \$39.0 million and \$31.2 million, respectively, and the fair value of these contracts was not significant at June 30, 2013 and 2012. During the three months ended June 30, 2013 and 2012, we recognized an insignificant gain and a \$1.5 million gain, respectively, on our foreign currency exchange contracts. During the six months ended June 30, 2013 and 2012, we recognized a gain of \$0.6 million and \$0.5 million, respectively. These gains and losses were offset by corresponding gains and losses on the related intercompany debt and both are included as a component of Other income (expense), net, in our Condensed Consolidated Statements of Operations.

## NOTE 7. ASSETS MEASURED AT FAIR VALUE

The following tables present information about our financial assets measured at fair value, on a recurring basis, as of June 30, 2013, and December 31, 2012. 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 June 30, 2013, and December 31, 2012.

June 30, 2013	Level 1 (In thousands)	Level 2	Level 3	Total
Certificates of deposit	\$—	\$11,784	\$—	\$11,784
Municipal bonds/notes	—	281	—	281
Total marketable securities	\$—	\$12,065	\$—	\$12,065

December 31, 2012	Level 1 (In thousands)	Level 2	Level 3	Total
Commercial paper	\$—	\$749	\$—	\$749
Certificates of deposit	—	12,498	—	12,498
Corporate bonds/notes	—	11,253	—	11,253
Municipal bonds/notes	—	285	—	285
Agency bonds/notes	898	—	—	898
Total marketable securities	\$898	\$24,785	\$—	\$25,683

There were no transfers in or out of Level 1, 2, or 3 fair value measurements during the three or six months ended June 30, 2013.

## 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):

	June 30, 2013	December 31, 2012
Parts and raw materials	\$67,868	\$59,484
Work in process	7,062	3,728
Finished goods	27,252	18,270

Inventories, net of reserves	\$102,182	\$81,482
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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## NOTE 9. PROPERTY AND EQUIPMENT

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

	June 30, 2013	December 31, 2012
Buildings and land	\$1,671	\$1,794
Machinery and equipment	43,184	40,993
Computer and communication equipment	23,715	22,895
Furniture and fixtures	4,784	1,845
Vehicles	384	359
Leasehold improvements	28,587	27,976
Construction in process	3,559	3,362
	105,884	99,224
Less: Accumulated depreciation	(65,111)	(59,701)
Property and equipment, net	\$40,773	\$39,523

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Depreciation expense	\$3,331	\$3,054	\$6,404	\$5,895

## NOTE 10. GOODWILL

The following summarizes the changes in goodwill during the six months ended June 30, 2013 (in thousands):

Gross carrying amount, beginning of period	\$60,391
Additions	83,180
Translation adjustments	1,087
Gross carrying amount, end of period	\$144,658

## NOTE 11. INTANGIBLE ASSETS

Other intangible assets consisted of the following as of June 30, 2013 (in thousands, except weighted-average useful life):

	Gross Carrying Amount	Effect of Changes in Exchange Rates	Impairment	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Life in Years
Amortizable intangibles:						
Technology-based	\$50,068	\$5	\$(12,310)	\$(13,981)	\$23,782	6
Trademarks and other	18,214	4	(5,409)	(2,620)	10,189	7
Total amortizable intangibles	\$68,282	\$9	\$(17,719)	\$(16,601)	\$33,971	

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Other intangible assets consisted of the following as of December 31, 2012 (in thousands, except weighted-average useful life):

	Gross Carrying Amount	Effect of Changes in Exchange Rates	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Life in Years
Amortizable intangibles:					
Technology-based	\$44,668	\$83	\$(10,775)	\$33,976	7
Trademarks and other	13,703	167	(1,637)	12,233	9
Total amortizable intangibles	\$58,371	\$250	\$(12,412)	\$46,209	

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Amortization expense	\$1,975	\$1,351	\$4,188	\$2,723

Amortization expense related to intangibles for each of the five years 2013 through 2017 and thereafter is as follows (in thousands):

Year Ending December 31,	
2013 (remaining)	\$3,940
2014	8,015
2015	6,928
2016	5,699
2017	3,843
Thereafter	5,546
	\$33,971

**NOTE 12. OTHER ACCRUED EXPENSES**

Other accrued expenses consisted of the following (in thousands):

	June 30, 2013	December 31, 2012
Other accrued expenses:		
Current deferred tax liability	\$4,139	\$4,137
Accrued restructuring costs	5,278	1,853
Current contingent consideration	1,982	2,773
Accrued sales and use tax	3,729	1,010
Other*	10,027	5,626
Total Other accrued expenses	\$25,155	\$15,399

\*Other accrued expenses consisted of items that are individually less than 5% of total current liabilities.



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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

NOTE 13. RESTRUCTURING  
COSTS

In April 2013, we committed to a restructuring plan to take advantage of additional cost saving opportunities in connection with our acquisition of Refusol. Under the plan, we will consolidate certain facilities, further centralize our manufacturing and rationalize certain products to most effectively meet customer needs. Collectively, these steps will enable us to more efficiently use our resources to achieve strategic goals.

As a part of the product rationalization initiated under the restructuring plan, we determined that the intangible assets associated with certain technology should be tested for recoverability. To test the intangible assets for recoverability, we compared the carrying value of the assets with their fair value which resulted in an impairment of \$17.7 million which is recorded in restructuring charges (benefit) and asset impairment in the Condensed Consolidated Statement of Operations for the three and six months ended June 30, 2013.

Over the next six months, we will continue to consolidate facilities; transfer the remaining supply chain activities of our Thin Films business unit to the Shenzhen, China manufacturing facility; and rationalize the inverter product line to most effectively meet the needs of its customers. As a result, we anticipate additional charges in the amount of \$11.0 million to \$13.0 million, of which approximately \$1.5 million to \$3.0 million are expected to be cash expenditures. Estimated total expenses to be incurred under the plan are approximately \$35.0 million to \$37.0 million. Of this total, approximately \$5.5 million to \$6.0 million relates to severance costs, \$4.5 million to \$5.0 million is for space consolidation, and \$25.0 million to \$26.0 million will be for product rationalization and impairments of the intangible assets associated with the technology around those products.

The following table summarizes the components of our restructuring costs incurred under the 2013 plan (in thousands):

	Three and Six Months Ended June 30, 2013
Severance and related costs	\$4,420
Property and equipment and intangible asset impairments	17,744
Facility closure costs	2,042
Total restructuring charges	\$24,206

The following table summarizes our restructuring liabilities under the 2013 plan (in thousands):

	Balances at December 31, 2012	Costs incurred and charged to expense	Cost paid or otherwise settled	Effect of change in exchange rates	Balances at June 30, 2013
Severance and related costs	\$—	\$4,420	\$(868	) \$50	\$3,602
Property and equipment and intangible asset impairments	—	17,744	(17,744	) —	—
Facility closure costs	—	2,042	(995	) (5	) 1,042
Total restructuring liabilities	\$—	\$24,206	\$(19,607	) \$45	\$4,644

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 production costs. Under this plan, we reduced our global headcount, consolidated our facilities by terminating or exiting several leases, and recorded impairments for assets no longer in use due to the restructuring of our business. All activities under this restructuring plan were completed prior to December 31, 2012. The following table summarizes our restructuring liabilities under this plan (in thousands):

	Balances at December 31, 2012	Costs incurred and charged to expense	Cost paid or otherwise settled	Effect of change in exchange rates	Balances at June 30, 2013
Severance and related costs	\$1,345	\$—	\$(1,128)	) \$—	\$217
Facility closure costs	508	—	(91)	) —	417
Total restructuring liabilities	\$1,853	\$—	\$(1,219)	) \$—	\$634

## NOTE 14. 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 products and 5 years to 10 years following installation for Solar Energy products. 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.

We establish accruals for warranty issues that are probable to result in future costs. Changes in product warranty accruals are as follows (in thousands):

	Three Months Ended June 30, 2013		Six Months Ended June 30, 2012	
Balances at beginning of period	\$13,739	\$14,319	\$14,797	\$14,719
Warranty liabilities acquired	10,678	—	10,678	—
Increases to accruals related to sales during the period	3,703	1,865	5,704	3,700
Warranty expenditures	(7,701)	(2,127)	(10,760)	(4,362)
Balances at end of period	\$20,419	\$14,057	\$20,419	\$14,057

We also offer our Solar Energy customers the option to purchase additional warranty coverage up to 20 years after the base warranty period expires. Deferred revenue related to such extended warranty contracts was \$20.8 million as of June 30, 2013 and is all classified in Other long-term liabilities in the Condensed Consolidated Balance Sheet. As of December 31, 2012, deferred revenue related to extended warranty contracts was \$20.5 million, of which \$0.4 million is classified in Customer deposits and \$20.1 million is classified in Other long-term liabilities.

NOTE 15. STOCK-BASED  
COMPENSATION

We recognize stock-based compensation expense based on the fair value of the awards issued. Stock-based compensation for the three and six months ended June 30, 2013 and 2012 is as follows (in thousands):

	Three Months Ended June 30, 2013		Six Months Ended June 30, 2012	
Stock-based compensation expense	\$3,170	\$2,228	\$5,204	\$7,237

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## Stock Options

Stock option awards, other than awards under our 2012-2014 Long Term Incentive Plan ("LTI Plan"), are generally granted with an exercise price equal to the market price of our common stock at the date of grant, a four-year vesting schedule, and a term of 10 years.

Under the 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 Company's achievement of return on net assets targets established by our Board of Directors at the beginning of each year. These awards are granted with an exercise price equal to the market price of our common stock at the date of grant and have a term of 10 years. 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 5.6 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.

In the second quarter of 2013, we granted additional options and awards under the LTI plan to our chief executive officer who was not previously a participant in the plan. The fair value of these shares was estimated using the Black-Scholes-Merton option pricing model utilizing an expected volatility of 68.9%, a risk free rate of 0.74%, a dividend yield of zero, and an expected term of 5.6 years. The weighted-average grant date fair value of the options is \$10.55 and the weighted-average grant date fair value of the awards is \$17.92.

Also in the second quarter of 2013, we awarded restricted stock units to our chief executive officer which vest one-third on the grant date and one-third each on September 30, 2013 and December 31, 2013. The grant-date fair value of the awards is \$17.92.

A summary of our stock option activity for the six months ended June 30, 2013 is as follows (in thousands):

	Shares	
Options outstanding at December 31, 2012	5,659	
Options granted	86	
Options exercised	(1,390	)
Options forfeited	(483	)
Options expired	(34	)
Options outstanding at June 30, 2013	3,838	

## Restricted Stock Units

Restricted Stock Units ("RSU") are generally granted with a four-year vesting schedule.

A summary of our non-vested RSU activity for the six months ended June 30, 2013 is as follows (in thousands):

	Shares	
Balance at December 31, 2012	2,073	
RSUs granted	191	
RSUs vested	(388	)
RSUs forfeited	(83	)
Balance at June 30, 2013	1,793	

## NOTE 16. ACCUMULATED OTHER COMPREHENSIVE INCOME

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

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Foreign Currency Adjustments	Unrealized Gains (Losses) on Marketable Securities	Total Accumulated Other Comprehensive Income
Balances at December 31, 2012	\$29,730	\$(5	) \$29,725
Current period other comprehensive income (loss)	(3,523	) (7	) (3,530
Balances at June 30, 2013	\$26,207	\$(12	) \$26,195

## NOTE 17. COMMITMENTS AND CONTINGENCIES

We have firm purchase commitments and agreements with various suppliers to ensure the availability of components. The obligation as of June 30, 2013 is approximately \$72.0 million. Our policy with respect to all purchase commitments, is to record losses, if any, when they are probable and reasonably estimable. We continuously monitor these commitments for exposure to potential losses and will record a provision for losses when it is deemed necessary. 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 and six months ended June 30, 2013.

## NOTE 18. RELATED PARTY TRANSACTIONS

During the three and six months ended June 30, 2013 and 2012, we engaged in the following transactions with companies related to members of our Board of Directors, as described below (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Sales - related parties	\$584	\$323	\$615	\$477
Rent expense - related parties	468	477	943	937
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 and six months ended June 30, 2013, we had sales to two such customers as noted above and accounts receivable from one such customers totaled \$0.6 million at June 30, 2013. During the three and six months ended June 30, 2012, we had sales to two such customers as noted above and no aggregate accounts receivable from these customers at December 31, 2012.

## 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 an interest. The leases relating to these spaces expire during 2021 and obligate us to total annual payments of approximately \$1.5 million, which includes facilities rent and common area maintenance costs.

NOTE 19. SEGMENT  
INFORMATION

Our Thin Films SBU 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 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 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. 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.

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Our Solar Energy SBU offers both a transformer-based and a transformerless advanced grid-tied PV inverter solution primarily for 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 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. We have also divided inventory and property and equipment based on business segment.

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

	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2013	2012	2013	2012
Thin Films	\$71,702	\$64,843	\$133,479	\$125,233
Solar Energy	68,009	50,815	118,046	96,212
Total	\$139,711	\$115,658	\$251,525	\$221,445

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

	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2013	2012	2013	2012
Thin Films	\$14,406	\$8,881	\$21,917	\$12,048
Solar Energy	(1,772 )	2,740	(1,564 )	3,233
Total segment operating income	12,634	11,621	20,353	15,281
Corporate expenses	—	(451 )	—	(913 )
Restructuring (charges) benefit	(24,206 )	144	(24,206 )	(2,431 )
Other income (expense), net	(330 )	1,775	(533 )	2,186
Income (loss) from continuing operations before income taxes	\$(11,902 )	\$13,089	\$(4,386 )	\$14,123

Corporate expenses in 2012 consist of intangible amortization that is now being allocated to the business units.

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

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ADVANCED ENERGY INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	June 30, 2013	December 31, 2012
Thin Films	\$41,549	\$40,965
Solar Energy	99,891	76,393
Total segment assets	141,440	117,358
Unallocated corporate property and equipment	1,515	3,647
Unallocated corporate assets	471,899	417,155
Consolidated total assets	\$614,854	\$538,160

"Corporate" is a non-operating business segment with the main purpose of supporting operations. Unallocated corporate assets include accounts receivable, deferred income taxes, other current assets and intangible assets.

During the three and six months ended June 30, 2013, we had one customer accounting for 10% or more of our sales. Sales to Applied Materials, Inc. were \$22.9 million or 16.4% of total sales for the three month period and \$41.6 million or 16.5% of total sales for the six month period. During the three and six months ended June 30, 2012, we had one customer accounting for 10% or more of our sales. Sales to Applied Materials, Inc. were \$17.8 million or 15.4% of total sales during the three month period and \$35.7 million or 16.1% of total sales during the six month period. Our sales to Applied Materials, Inc. include thin film products used in semiconductor processing and solar, flat panel display, and architectural glass applications. No other customer accounted for 10% or more of our sales during these periods.

**NOTE 20. CREDIT FACILITIES**

In October 2012, we, along with two of our wholly-owned subsidiaries, AE Solar Energy, Inc. and Sekidenko, Inc., entered into a Credit Agreement, subsequently amended in November 2012 and August 2013, (the "Credit Agreement") with Wells Fargo Bank, National Association ("Wells Fargo"), as agent for and on behalf of certain lenders (each a "Lender"), which provides for a new secured revolving credit facility of up to \$50.0 million (the "Credit Facility"). The Credit Facility provides us with the ability to borrow up to \$50.0 million, although the amount of the Credit Facility may be increased by an additional \$25.0 million up to a total of \$75.0 million subject to receipt of lender commitments and other conditions. Borrowings under the Credit Facility are subject to a borrowing base based upon our domestic accounts receivable and inventory and are available for various corporate purposes, including general working capital, capital expenditures, and certain permitted acquisitions. The Credit Agreement also permits us to issue letters of credit. The maturity date of the Credit Facility is October 12, 2017.

At our election, the loans comprising each borrowing will bear interest at a rate per annum equal to either: (a) a "base rate" plus between one-half (0.5%) and one (1.0%) full percentage point depending on the amount available for additional draws under the Credit Facility ("Base Rate Loan"); or (b) the LIBOR rate then in effect plus between one and one-half (1.5%) and two (2%) percentage points depending on the amount available for additional draws under the Credit Facility. The "base rate" for any Base Rate Loan will be the greatest of the federal funds rate plus one-half (0.5%) percentage point; the one-month LIBOR rate plus one (1.0%) percentage point; and Wells Fargo's "prime rate" then in effect. As of June 30, 2013, the rate in effect was 4.25%.

The Credit Agreement requires us to pay certain fees to the Lenders and contains affirmative and negative covenants, which, among other things, require us to deliver to the Lenders specified quarterly and annual financial information, and limit us and our Guarantors (as defined below), subject to various exceptions and thresholds, from, among other things: (i) creating liens on our assets; (ii) merging with other companies or engaging in other extraordinary corporate transactions; (iii) selling certain assets or properties; (iv) entering into transactions with affiliates; (v) making certain types of investments; (vi) changing the nature of our business; and (vii) paying certain distributions or certain other payments to affiliates. Additionally, there are the following financial covenants: (i) during any period in which \$12.5 million or less is available to us under the Credit Facility and for sixty (60) days thereafter, the Credit Agreement requires the maintenance of a defined consolidated fixed charge coverage ratio; and (ii) if there is any indebtedness under any issued and outstanding convertible notes, we are required to maintain a specified level of liquidity.

The Credit Agreement requires us to pay certain fees to the Lenders, including a \$2,500 collateral management fee for each month that the Credit Facility is in place, and a fee based on the unused amount of the Credit Facility. In

addition, if the Credit Agreement is terminated by us within one (1) year we will be obligated to pay an early termination fee equal to one percent (1%) of the maximum amount that may be drawn or borrowed under the Credit Facility. During the six months ended June 30, 2013, we expensed \$0.2 million in interest and fees related to unused line of credit fees and amortization of debt issuance costs. We did not borrow against the Credit Facility in the three and six month periods of 2013.



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Pursuant to a Guaranty and Security Agreement (the "GS Agreement"), borrowings under the Credit Facility are guaranteed by our wholly-owned subsidiaries Aera Corporation and AEI US Subsidiary, Inc., (collectively the "Guarantors"). Under the GS Agreement, we and the Guarantors granted the Lenders a security interest in certain, but not all, of our and the Guarantors' assets.

As part of the acquisition of Refusol described in Note 2. Business Acquisitions and Disposition, we assumed the outstanding debt of Refusol as of the acquisition date. There are three outstanding loans with banks related to this debt.

Refusol, GmbH has an outstanding loan agreement with Commerzbank Aktiengesellschaft ("Commerzbank") for up to 8.0 million Euros ("Commerzbank Loan Agreement"). The agreement allows Refusol to borrow up to 8.0 million Euros through various types of instruments including an overdraft (revolving) facilities, money market (term) loans, surety loans, or guarantees. There is no maturity date. Borrowings under the revolving credit facility bear interest at 5.32%. Surety and guarantee loans bear interest at 1.5%. Money market loans are granted by separate agreement when requested and must meet certain Euro thresholds related to the value depending on the maturity date chosen. The Commerzbank Loan Agreement requires the payment of a credit commission of 0.5% of the total loan amount. The agreement contains a various covenants including a financial covenant requiring a specified level of equity.

Refusol, GmbH also has an outstanding loan agreement with Bayerische Landesbank ("Bayern") allowing it to borrow up to 4.0 million Euros either as overdraft facilities, term loans, or guarantees with repayment occurring one lump sum at the maturity date of the individual transaction with respect to term loans, or maturity of the loan agreement which is July 31, 2013 (the "Bayern Loan Agreement"). The overdraft facility bears interest at 4.5%. Term loans bear interest at the money market rate established by Bayern at the time of the loan plus a margin of 1.9%. Guarantees bear interest at 1.25% and have an issuing fee per guarantee. Loan commitment fees are 0.25% on the unused portion of the total loan amount. The Bayern Loan Agreement contains certain reporting requirements and a financial covenant requiring a specified level of equity. We intend to enter into an extension of this loan agreement.

Refusol, Inc., a wholly-owned subsidiary of Refusol, GmbH located in the United States, has a revolving line of credit with Wells Fargo with an aggregate principal amount of \$1.5 million and a maturity date of July 1, 2013. Borrowings under the line of credit are secured by all of Refusol, Inc.'s accounts receivable, inventory, and property, plant, and equipment and a letter of credit issued under the Commerzbank Loan Agreement. The line of credit bears interest at either (a) a fluctuating rate per annum one quarter of one percent (0.25%) above the Prime Rate or (b) the LIBOR rate then in effect plus two percent (2.0%). Refusol, Inc. has the option to select the method of interest each month. A commitment fee of 0.125% is payable by Refusol, Inc. on the unused portion of the line of credit. The line of credit contains certain affirmative and negative covenants limiting Refusol, Inc.'s ability to borrow additional funds or guarantee the debt of others. This line of credit was paid down and cancelled on its maturity date of July 1, 2013.

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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 circumstances "will" 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, 2012. 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 and plasma enhanced chemical and physical processing for various products as well as grid-tied power conversion. We also supply thermal instrumentation products for advanced temperature control in the thin film process for these markets. 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 convert 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, used primarily in the semiconductor industry, provide temperature measurement and control solutions for applications in which time-temperature cycles affect 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 advanced transformer-based or transformerless grid-tied PV solutions for 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, 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.

On November 8, 2012, we acquired Solvix SA ("Solvix"), a privately held company based in Villaz-Saint-Pierre, Switzerland. The financial results discussed below include the financial results of Solvix for the three and six months ended June 30, 2013. Note 2. Business Acquisition & Disposition in Part I Item 1 of this Form 10-Q describes the acquisition of Solvix.

As also noted in Note 2. Business Acquisitions and Disposition in Part I Item 1 of this Form 10-Q, we acquired Refusol Holdings GmbH ("Refusol") on April 8, 2013. The financial results discussed below include the financial results of Refusol for the period April 8, 2013 through June 30, 2013.



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Our analysis presented below is organized to provide the information we believe will be helpful 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. Also included in the following analysis are measures that are not in accordance with U.S. GAAP. A reconciliation of the non-GAAP measures to U.S. GAAP is also provided.

## 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		Six Months	
	Ended June 30,		Ended June 30,	
	2013	2012	2013	2012
Sales	\$139,711	\$115,658	\$251,525	\$221,445
Gross profit	53,259	43,729	95,098	83,473
Operating expenses	64,831	32,415	98,951	71,536
Operating income (loss)	(11,572 )	11,314	(3,853 )	11,937
Other income (expenses), net	(330 )	1,775	(533 )	2,186
Income (loss) from continuing operations before income taxes	(11,902 )	13,089	(4,386 )	14,123
Provision (benefit) for income taxes	(2,120 )	4,288	(1,430 )	4,556
Income (loss) from continuing operations, net of income taxes	\$(9,782 )	\$8,801	\$(2,956 )	\$9,567

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		Six Months		
	Ended June 30,		Ended June 30,		
	2013	2012	2013	2012	
Sales	100.0	% 100.0	% 100.0	% 100.0	%
Gross profit	38.1	% 37.8	% 37.8	% 37.7	%
Operating expenses	46.4	% 28.0	% 39.3	% 32.3	%
Operating income (loss)	(8.3 )	% 9.8	% (1.5 )	% 5.4	%
Other income (expenses), net	(0.2 )	% 1.5	% (0.2 )	% 1.0	%
Income (loss) from continuing operations before income taxes	(8.5 )	% 11.3	% (1.7 )	% 6.4	%
Provision (benefit) for income taxes	(1.5 )	% 3.7	% (0.6 )	% 2.1	%
Income (loss) from continuing operations, net of income taxes	(7.0 )	% 7.6	% (1.1 )	% 4.3	%

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## SALES

The following tables summarize annual sales, and percentages of sales, by segment for the three and six months ended June 30, 2013 and 2012 (in thousands):

	Three Months Ended June 30,						
	2013	% of Total Sales	2012	% of Total Sales	Increase/ (Decrease)	Percent Change	
Thin Films:							
Semiconductor capital equipment	\$41,067	29.4	% \$36,641	31.7	% \$4,426	12.1	%
Non-semiconductor capital equipment	18,494	13.2	% 15,292	13.2	% 3,202	20.9	%
Global support	12,141	8.7	% 12,910	11.2	% (769 )	(6.0)	)%
Total Thin Films	71,702	51.3	% 64,843	56.1	% 6,859	10.6	%
Solar Energy	68,009	48.7	% 50,815	43.9	% 17,194	33.8	%
Total sales	\$139,711	100.0	% \$115,658	100.0	% \$24,053	20.8	%
	Six Months Ended June 30,						
	2013	% of Total Sales	2012	% of Total Sales	Increase/ (Decrease)	Percent Change	
Thin Films:							
Semiconductor capital equipment	\$73,767	29.3	% \$74,989	33.9	% \$(1,222 )	(1.6)	)%
Non-semiconductor capital equipment	35,104	14.0	% 25,360	11.5	% 9,744	38.4	%
Global support	24,608	9.8	% 24,884	11.2	% (276 )	(1.1)	)%
Total Thin Films	133,479	53.1	% 125,233	56.6	% 8,246	6.6	%
Solar Energy	118,046	46.9	% 96,212	43.4	% 21,834	22.7	%
Total sales	\$251,525	100.0	% \$221,445	100.0	% \$30,080	13.6	%
Total Sales							

Overall, our sales increased \$24.1 million, or 20.8%, to \$139.7 million for the three months ended June 30, 2013 from \$115.7 million for the three months ended June 30, 2012. The increase in sales is the result of improved market conditions in our Thin Films business coupled with the acquisition of the three-phase string inverter product line. Sales in the thin film semiconductor markets continue to improve as we gained market share from prior design wins and expanded into other applications. The increase in sales in non-semiconductor markets is partially due to the acquisition of Solvix in the fourth quarter of 2012 coupled with increased sales to the flat panel display market. For the six months ended June 30, 2013, sales increased \$30.1 million, or 13.6%, to \$251.5 million from \$221.4 million for the six months ended June 30, 2012. The acquisition of the three-phase string inverter product line drove higher sales in our Solar Energy business while significant improvements in the flat panel display market resulted in higher sales in the Thin Films business unit.

## Thin Films

Results for our Thin Films SBU for the three and six months ended June 30, 2013 and 2012 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Sales	\$71,702	\$64,843	\$133,479	\$125,233
Operating Income	14,406	8,881	21,917	12,048

Thin Films sales increased 10.6% to \$71.7 million, or 51.3% of sales, for the three months ended June 30, 2013 versus \$64.8 million, or 56.1% of sales, for the three months ended June 30, 2012. For the six months ended June 30, 2013 sales were \$133.5 million, an increase of \$8.2 million, or 6.6%, from the same period of 2012. The increase for both periods reflects the market improvements noted above coupled with sales attributable to our acquisition of Solvix.



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In the three months ended June 30, 2013, sales in the thin film semiconductor market increased 12.1% to \$41.1 million, or 29.4% of sales, from \$36.6 million, or 31.7% of sales for the three months ended June 30, 2012. For the six months ended June 30, 2013, sales in the thin film semiconductor market were relatively flat at \$73.8 million, or 29.3% of sales, compared to \$75.0 million, or 33.9% of sales for the six months ended June 30, 2012. The decline in end user capital expansion that characterized most of 2012 began to improve in the first quarter of 2013 and continued to increase through the second quarter of 2013. This coupled with prior design wins and expansion into etch and gas abatement applications drove higher sales in the semiconductor markets. Although the stronger capital spending is expected to remain through the remainder of the year and into 2014, we expect an industry pause which will result in sales being flat to slightly lower in the second half of 2013.

Sales in the thin film non-semiconductor capital equipment markets increased 20.9% to \$18.5 million, or 13.2% of sales, for the three months ended June 30, 2013 compared to \$15.3 million, or 13.2% of sales, for the three months ended June 30, 2012. Sales in the thin film non-semiconductor capital equipment markets increased 38.4% to \$35.1 million, or 14.0% of sales, for the six months ended June 30, 2013 compared to \$25.4 million, or 11.5% of sales, for the six months ended June 30, 2012. 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 flat panel display market continues to drive the increase in the non-semiconductor market.

Sales to customers in the thin film solar panel market were relatively flat at \$1.9 million, or 1.4% of total sales, for the three months ended June 30, 2013 as compared to \$1.9 million, or 1.7% of total sales, for the three months ended June 30, 2012. Sales to customers in the thin film solar panel market declined \$1.7 million to \$2.2 million for the six months ended June 30, 2013 as compared to the same period of 2012. As capacity in the solar panel market continues to exceed demand, significant new investment in this market is not anticipated in the foreseeable future. We expect sales to the solar panel market to remain at historically low levels through the second half of 2013.

The flat panel market experienced significant growth in the first quarter of 2013 which continued into the second quarter, increasing 277.3% for the three months ended June 30, 2013 and 379.9% in the six months ended June 30, 2013 compared to the same periods in 2012. Continued investments in the transition to active-matrix light-emitting diode ("AMOLED") technology have resulted in stronger sales through the first half of 2013. As installations of the investments from the first half of 2013 continue into the third quarter, we expect investments in the flat panel display market to pause resulting in lower demand for our products in the second half of 2013.

Our global support revenue decreased to \$12.1 million, or 8.7% of total sales, for the three months ended June 30, 2013, compared to \$12.9 million, representing 11.2% of sales, for the three months ended June 30, 2012. Global support revenue for the six months ended June 30, 2013 were flat compared to the six months ended June 30, 2012. Although revenue declined slightly in the second quarter of 2013, growing interest in upgrades and refurbishment programs coupled with our preventative maintenance offering is expected to result in stable to higher revenues for our global support business.

Operating income for Thin Films was \$14.4 million for the three months ended June 30, 2013, an increase of \$5.5 million from the same period of 2012. For the six months ended June 30, 2013, operating income for Thin Films was \$21.9 million compared to \$12.0 million for the same period of 2012. The increase for both periods is the result of higher sales and improved gross margins resulting from improved manufacturing efficiencies on higher production volumes.

**Solar Energy**

Results for our Solar Energy SBU for the three and six months ended June 30, 2013 and 2012 are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Sales	\$68,009	\$50,815	\$118,046	\$96,212
Operating income	(1,772	) 2,740	(1,564	) 3,233

Solar Energy sales were \$68.0 million, or 48.7% of sales, for the three months ended June 30, 2013 as compared to \$50.8 million, or 43.9% of sales, for the three months ended June 30, 2012. For the six months ended June 30, 2013, Solar Energy sales were \$118.0 million, or 46.9% of sales, as compared to \$96.2 million, or 43.4% of sales, for the three months ended June 30, 2012. The increase in sales in 2013 for both the quarter and full year as compared to the same periods a year ago is due to the acquisition of the three-phase string inverter product line discussed in Note 2. Business Acquisition and Disposition in Part I Item I of this Form 10-Q.



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Operating income for Solar Energy was \$(1.8) million for the three months ended June 30, 2013 as compared to \$2.7 million for the three months ended June 30, 2012. For the six months ended June 30, 2013, operating income was \$(1.6) million compared to \$3.2 million for the same period of 2012. The decrease in operating income for both the three months and six months ended June 30, 2013 as compared to the same periods in 2012 is due to additional operating expenses associated with the acquired three-phase string inverter product line. The benefits from the restructuring plan discussed below will begin impacting results in the third quarter of 2013 bringing these operating expenses down.

**Backlog**

Our overall backlog was \$87.8 million at June 30, 2013 as compared to \$92.7 million at December 31, 2012. During the last week of the second quarter we received a large order in our solar business which we were not able to confirm through our normal process until the first day of the third quarter. Had this order been confirmed prior to June 30, 2013, our backlog would have been \$123.7 million.

**GROSS PROFIT**

Our gross profit was \$53.3 million, or 38.1% of sales, for the three months ended June 30, 2013, as compared to \$43.7 million, or 37.8% of sales for the three months ended June 30, 2012. Gross profit for the six months ended June 30, 2013 was \$95.1 million, or 37.8% of sales as compared to \$83.5 million, or 37.7% of sales for the six months ended June 30, 2012. The year-over-year increase in terms of absolute dollars for both the quarter and year-to-date periods is due to the overall increase in sales in our Thin Films business and the acquisition of the three-phase string inverter product line. Gross profit as a percentage of sales was relatively flat compared to the same quarter in the prior year as the mix of sales between our two business units shifted a higher portion to the Solar Energy business which has lower gross margins.

**OPERATING EXPENSE**

The following table summarizes our operating expenses as a percentage of sales for the three and six months ended June 30, 2013 and 2012 (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,					
	2013		2012		2013		2012			
Research and development	\$15,740	11.3 %	\$14,502	12.5 %	\$29,993	11.9 %	\$29,617	13.4 %		
Selling, general, and administrative	22,910	16.4 %	16,706	14.4 %	40,564	16.1 %	36,765	16.6 %		
Amortization of intangible assets	1,975	1.4 %	1,351	1.2 %	4,188	1.7 %	2,723	1.2 %		
Restructuring charges (benefit) and asset impairment	24,206	17.3 %	(144)	(0.1)%	24,206	9.6 %	2,431	1.1 %		
Total operating expenses	\$64,831	46.4 %	\$32,415	28.0 %	\$98,951	39.3 %	\$71,536	32.3 %		

As a result of declines in certain markets that we serve, we initiated a plan in September 2011 to re-align our manufacturing and research and development activities to be closer to our customers and reduce production costs. These initiatives included headcount reductions, facilities closures, and asset impairments and were completed in the fourth quarter of 2012.

In April 2013, in connection with our acquisition of Refusol Holdings GmbH ("Refusol") described in Note 2. Business Acquisitions and Disposition in Part I Item I of this Form 10-Q, we committed to a restructuring plan to take advantage of additional cost saving opportunities. During the three months ended June 30, 2013, we incurred restructuring charges of \$24.2 million related to reductions in headcount, facility closures, and intangible asset impairments. Over the next six months, we will continue our efforts to consolidate facilities including moving the remaining manufacturing in Bend, Oregon to our Fort Collins, Colorado facility; transfer the remaining supply chain activities of our Thin Films business unit to the Shenzhen, China manufacturing facility; and rationalize the inverter product line. As a result, we anticipate additional charges in the amount of \$11.0 million to \$13.0 million, of which approximately \$1.5 million to \$3.0 million are expected to be cash expenditures. Estimated total expenses to be incurred under the plan are approximately \$35.0 million to \$37.0 million. Of this total, approximately \$5.5 million to

\$6.0 million relates to severance costs, \$4.5 million to \$5.0 million is for space consolidation, and \$25.0 million to \$26.0 million will be for product rationalization and impairments of the intangible assets associated with the technology related to those products. The actions taken under this restructuring plan as well as those underway and already taken are expected to deliver annual savings of approximately \$70.0 to \$75.0 million.

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## 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, except those incurred as a result of a business acquisition.

Research and development expenses for the three months ended June 30, 2013 were \$15.7 million, or 11.3% of sales, as compared to \$14.5 million, or 12.5% of sales, for the three months ended June 30, 2012. Research and development costs increased slightly in the three months ended June 30, 2013 as compared to the same period in 2012 primarily due to the acquisition of the three-phase string inverter product line and the addition of expenses incurred for the research and development activities related to that product. Research and development costs were flat for the six months ended June 30, 2013 as compared to the same period of 2012. The higher costs associated with the acquisition of the three-phase string inverter product were offset by the full year impact in 2013 of the cost savings associated with the restructuring plan announced in late 2011 and implemented throughout 2012.

## 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, including acquisition-related activities.

Selling, general and administrative ("SG&A") expenses increased \$6.2 million and \$3.8 million in the three months and six months ended June 30, 2013 as compared to the same periods in 2012. The increases are primarily due to the acquisition of the three-phase string inverter product line coupled with higher purchased services and incentive compensation accruals.

## Amortization Expense

Amortization of intangible assets expense was \$2.0 million and \$4.2 million for the three months and six months ended June 30, 2013, compared to \$1.4 million and \$2.7 million for the same periods ending June 30, 2012. During the second quarter of 2013, we recorded a partial impairment of intangible assets acquired from PV Powered in May 2010. As a result of the acquisition of the three-phase string inverter product line, we assessed the overall Solar product line for product optimization, resulting in an impairment to the technology purchased from PV Powered. This reduced amortization related to these products which was offset by amortization related to the intangible assets acquired with Refusol and Solvix.

## Other Income (Expenses), net

Other income (expenses), net consists primarily of interest income and expense, foreign exchange gains and losses, gains and losses on sales of fixed assets, and other miscellaneous items. Other income (expenses), net was a \$0.3 million loss for the three months ended June 30, 2013 as compared to a \$1.8 million gain in the same period of 2012. For the six month period ended June 30, 2013, other income (expenses), net was a loss of \$0.5 million compared to income of \$2.2 million in the prior year. The loss in the current year is primarily due to foreign exchange losses while the prior year gain resulted from the sale of fixed assets for both the quarter and year-to-date periods.

## Provision for Income Taxes

We recorded an income tax benefit from continuing operations for the three months ended June 30, 2013 of \$2.1 million compared to expense of \$4.3 million for the three months ended June 30, 2012, resulting in effective tax rates of 17.8% and 32.8%, respectively. For the six months ended June 30, 2013, we recorded an income tax benefit of \$1.4 million compared to an expense of \$4.6 million for the same period of 2012, resulting in effective tax rates of 32.6% and 32.3%, respectively. 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. In addition, during the three months ended

June 30, 2013, we recognized a discrete tax benefit of \$1.4 million related to the January 2, 2013 reinstatement of the 2012 U.S. research and development tax credit.

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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<sup>®</sup> mass flow control and related product lines to Hitachi, 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. Results of continuing operations for 2012 were reduced by the revenue and costs associated with the gas flow control business which are included in Income from discontinued operations, net of income taxes, in our Condensed Consolidated Statements of Operations.

**Non-GAAP Results**

To evaluate business performance against business objectives and for planning purposes, management uses non-GAAP results. We believe these measures will enhance investors' ability to review our business from the same perspective as management and facilitate comparisons of this period's results with prior periods. These non-GAAP measures are not in accordance with U.S. GAAP and may differ from non-GAAP methods of accounting and reporting used by other companies. The presentation of this additional information should not be considered a substitute for results prepared in accordance with U.S. GAAP.

The non-GAAP results presented below exclude the impact of restructuring charges, stock-based compensation, amortization of intangible assets, and acquisition-related costs (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Income (loss) from continuing operations, net of tax, as reported	\$(9,782	) \$8,801	\$(2,956	) \$9,567
Adjustments, net of tax				
Restructuring charges	19,579	(92	) 19,579	1,559
One-time gain on sale of flow assets	—	(1,452	) —	(1,452
Acquisition-related costs	—	—	993	—
Stock-based compensation	2,524	1,419	4,371	4,610
Amortization of intangible assets	1,573	861	3,583	1,735
Non-GAAP income from continuing operations, net of tax	\$13,894	\$9,537	\$25,570	\$16,019
Diluted weighted-average common shares outstanding	40,150	39,583	39,899	40,460
Non-GAAP Earnings Per Share	\$0.35	\$0.24	\$0.64	\$0.40

**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. From time to time, we may also receive pressure from customers to decrease sales prices due to reductions in the cost structure of our products from cost improvement initiatives and decreases in component part prices. Sales price increases and decreases, however, were not significant in any of the periods 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,

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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 as well as our credit facilities discussed in Note 20. Credit Facilities in Part I Item 1 of this Form 10-Q.

At June 30, 2013, we had \$99.1 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. We may seek additional financing from time to time.

On October 12, 2012, we entered into an agreement with Wells Fargo Bank, National Association which provides for a secured revolving credit facility ("Credit Facility") of up to \$50.0 million. Borrowings under the Credit Facility are subject to a borrowing base based upon our accounts receivable and inventory and are available for various corporate purposes. The Credit Facility provides us further flexibility for execution of our strategic plans including acquisitions. With the acquisition of Refusol, we assumed the outstanding balances under their existing lines of credit. Refusol has three notes with various banks that provide up to 12.0 million Euros of borrowing and \$1.5 million of borrowing. As of June 30, 2013 there was \$13.3 million outstanding on these notes. For more information on these Credit Facilities see Note 20. Credit Facilities of our Consolidated Financial Statements.

On October 30, 2012, we announced a \$25.0 million share repurchase program authorized by our Board of Directors. The repurchase program is authorized through October 2013, requires no minimum number of shares to be repurchased, and may be discontinued at any time. No repurchases have been made under this program.

**CASH FLOWS**

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

	Six Months Ended June 30,	
	2013	2012
Net cash provided by (used in) operating activities	\$(10,012	) \$64,803
Net cash used in investing activities	(67,479	) (5,210
Net cash provided by (used in) financing activities	17,762	(56,005
Effect of currency translation on cash	227	(961
Increase (decrease) in cash and cash equivalents	(59,502	) 2,627
Cash and cash equivalents, beginning of the period	146,564	117,639
Cash and cash equivalents, end of the period	\$87,062	\$120,266

**2013 CASH FLOWS COMPARED TO 2012**

Net cash provided by (used in) operating activities

Net cash used in operating activities for the six months ended June 30, 2013 was \$10.0 million, compared to cash provided by operating activities of \$64.8 million for the same period ended June 30, 2012. The decrease of \$74.8 million in net cash flows from operating activities is primarily due to higher uses of working capital. The increase in revenues noted above have resulted in the related growth of accounts receivable balances. In addition, there were increases in cash paid for taxes resulting from the improved operating results.

Net cash used in investing activities

Net cash used in investing activities for the six months ended June 30, 2013 was \$67.5 million, an increase of \$62.3 million from the same period ended June 30, 2012. The increase in cash used is due to the cash payment of \$77.2 million for the acquisition of Refusol. Capital expenditures for the three and six months ended June 30, 2013 were down \$0.4 million compared to the same period in 2012. We expect to fund future capital expenditures with cash generated from operations.

Net cash provided by (used in) financing activities

Net cash provided by financing activities in the six months ended June 30, 2013 was \$17.8 million, a \$73.8 million change from the cash used in financing activities of \$56.0 million in the same period of 2012. The exercise of stock options provided





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\$16.9 million of cash in 2013 as compared to \$1.6 million in 2012. The six months ended June 30, 2012 included stock repurchases of \$57.1 million while no repurchases have been made in 2013.

## Effect of currency translation on cash

During the six months ended June 30, 2013, currency translation had a positive \$0.2 million impact on cash compared to a negative impact of \$1.0 million in the same period of 2012. 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"), Swiss Franc ("CHF"), Canadian Dollar ("CAD"), Euro ("EUR"), and Indian Rupee ("INR"). Our purchasing and sales activities are primarily denominated in USD, JPY, CNY, and EUR. The change in these key currency rates during the six months ended June 30, 2013 and 2012 are as follows:

From	To	Six Months Ended June 30,		
		2013	2012	
CNY	USD	1.1	% (0.8	)%
EUR	USD	(1.4	)% (2.7	)%
JPY	USD	(12.5	)% (2.6	)%
KRW	USD	(6.9	)% 1.6	%
NTD	USD	(3.6	)% 1.9	%
GBP	USD	(6.4	)% 0.7	%
CAD	USD	(5.7	)% (0.1	)%
CHF	USD	(3.1	)% (1.7	)%
INR	USD	(7.7	)% (2.7	)%

## 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, 2012 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, 2012, 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 and credit facility. 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.

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As of June 30, 2013, our investments consisted primarily of certificates of deposit, municipal bonds, 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 \$0.1 million.

We had \$13.4 million of debt outstanding as of June 30, 2013 under various debt instruments, some with variable interest rates and principal payments. Assuming a full drawdown on all outstanding loan agreements subject to variable interest rates, and holding other variables constant, a hypothetical immediate one percentage point change in interest rates would be expected to have an impact on pre-tax earnings and cash flows of approximately \$0.5 million over the course of 12 months.

### 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, 2012.

## 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 June 30, 2013. 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.

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Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting, except as discussed below, 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.

As discussed in Note 2, Business Acquisition and Disposition, to our Condensed Consolidated Financial Statements, on April 8, 2013, we acquired Refusol. We considered the results of our pre-acquisition due diligence activities, the continuation by Refusol of their established internal control over financial reporting, and our implementation of additional internal control over financial reporting activities as part of our overall evaluation of disclosure controls and procedures as of June 30, 2013. We believe the design of Refusol's established internal control over financial reporting is sufficiently different from our overall design and the controls implemented to integrate Refusol's financial operations into our existing operations constitute a change in internal controls. We are in the process of completing a more complete review of Refusol's internal control over financial reporting and will be implementing changes to better align its reporting and controls with the rest of Advanced Energy. As a result of the timing of the acquisition and the changes that are anticipated to be made, we currently intend to exclude Refusol from the December 31, 2013 assessment of our internal control over financial reporting.

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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 quarter ended June 30, 2013. 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, 2012.

ITEM 1A. RISK FACTORS

Item 1A, "Risk Factors," of our Annual Report on Form 10-K for the year ended December 31, 2012 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.

Activities necessary to integrate acquisitions may result in costs in excess of current expectations or be less successful than anticipated.

As noted in Note 2. Business Acquisitions and Disposition in Part I Item 1 of this Form 10-Q, we recently acquired Refusol Holding GmbH, and we may acquire other businesses in the future. The success of such transactions will depend on, among other things, our ability to integrate assets and personnel acquired in these transactions and to apply our internal controls process to these acquired businesses. The integration of acquisitions may require significant attention from our management, and the diversion of management's attention and resources could have a material adverse effect on our ability to manage our business. Furthermore, we may not realize the degree or timing of benefits we anticipated when we first entered into the acquisition transaction, or the acquired business may cause us to incur unanticipated costs or liabilities. If actual integration costs are higher than amounts originally anticipated, if we are unable to integrate the assets and personnel acquired in an acquisition as anticipated, if we are unable to benefit from anticipated sales, or if we are unable to fully benefit from anticipated synergies, our business, financial condition, results of operations and cash flows could be materially adversely affected.

There are increased risks associated with restructuring plans and transferring further activities to our Shenzhen, China and Pune, India facilities.

As part of our April 2013 restructuring plan, we are taking steps to reduce operating costs across the company. These steps include transferring even more of our various operating activities, such as supply chain management, manufacturing, engineering and other activities, to our Shenzhen, China facility. This means that we will be even more highly dependent on our China-based operations. Given our recent acquisition of Refusol, we are also looking at ways to reduce our operating costs by transferring activities to their Pune, India facility. Such concentration exposes us to political, labor, culture, currency, tax, customs and other various risks unique to those regions. These risks may have a material adverse effect on our operations, business, results of operations, and financial condition.

We must continually design and introduce new products into the markets we serve to respond to competition and rapid technological changes.

As we operate in a highly competitive environment where innovation is critical, our future success depends on many factors, including the effective commercialization and customer acceptance of our products and services. The development, introduction and support of a broadening set of products (such as the recent introduction of our 1 megawatt solar inverter) is critical to our continued success. Our results of operations could be adversely affected if we do not continue to develop new products, improve and develop new applications for existing products, and

differentiate our products from those of competitors resulting in their adoption by customers.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

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None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

On August 5, 2013, Advanced Energy Industries, Inc. (the "Company") and Yuval Wasserman, the President of the Company's Thin Films Business Unit, reached an agreement to have Mr. Wasserman relocate next year from Fort Collins, Colorado to the San Jose, California area to be closer to U.S. customers and be able to more easily travel to Asia-based customers, suppliers and our operation hub in Shenzhen. The Company would agree to pay relocation expenses related to closing costs on the sale and purchase of a home, up to 90 days of temporary housing (duplicate house carrying costs), moving expenses and other miscellaneous expenses, all estimated at approximately \$140,000 to \$150,000. The relocation assistance is subject to repayment if Mr. Wasserman voluntarily terminates employment within one year of the relocation.

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ITEM 6. EXHIBITS

- 2.1 Sale and Purchase Agreement by and among Advanced Energy Industries, Inc., Blitz S13-103 GmbH, Jolaos Verwaltungs GmbH and Prettl Beteiligungs Holdings GmbH, dated as of April 8, 2013. (1)
- 3.1 Restated Bylaws, as amended.
  - 10.1 Amendment No. 2 to Credit Agreement dated August 5, 2013 among Wells Fargo Bank, National Association, Advanced Energy Industries, Inc. AE Solar Energy, Inc., Sekidenko, Inc., AEI US Subsidiary, Inc. and Aera Corporation.
- 10.2 Form of Notice of Grant for Restricted Stock Unit. (2)
- 10.3 Form of Restricted Stock Unit Agreement. (2)
- 10.4 Form of Notice of Grant of Stock Option. (2)
- 10.5 Form of Incentive Stock Option Agreement. (2)
- 10.6 Form of Non-Qualified Stock Option Agreement. (2)
- 10.7 Form of LTI Notice of Grant. (2)
- 10.8 Form of LTI Performance Stock Option Agreement. (2)
- 10.9 Form of LTI Performance Stock Unit Agreement. (2)
- 10.10 Relocation Agreement, dated August 5, 2013, by and among Advanced Energy Industries, Inc. and Yuval Wasserman.
- 10.11 Loan agreement dated February 1, 2011 among Commerzbank Aktiengesellschaft, Refusol GmbH, and Refu Elektronik, GmbH.
- 10.12 Addendum No. 1 to Loan Agreement between Commerzbank Aktiengesellschaft, Refusol GmbH, and Refu Elektronik, GmbH.
- 10.13 Master Loan Agreement dated August 18, 2011 among Bayerische Landesbank and Refusol GmbH.
- 10.14 1st Amendment dated July 30, 2012 to Master Loan Agreement among Bayerische Landesbank and Refusol GmbH.
- 10.15 Credit Agreement dated March 1, 2012 among Wells Fargo Bank, National Association and Refusol, Inc.
- 10.16 Extension to Credit Agreement dated February 19, 2013 among Wells Fargo Bank, National Association and Refusol, Inc.
- 31.1 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.



31.2 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.

(1 ) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 000-26966), filed April 11, 2013.

(2 ) Incorporated by reference to the Registrant's Current Report on Form 8-K (File No. 000-26966), filed May 10, 2013.

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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: August 6, 2013

/s/ Danny C. Herron  
Danny C. Herron  
Executive Vice President and Chief Financial  
Officer

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