

Ascent Solar Technologies, Inc.  
Form 10-Q  
April 28, 2011  
Table of Contents

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended March 31, 2011

or

**TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from            to

Commission File No. 001-32919

**Ascent Solar Technologies, Inc.**

(Exact name of registrant as specified in its charter)

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<b>Delaware</b> (State or other jurisdiction of incorporation or organization)	<b>20-3672603</b> (I.R.S. Employer Identification No.)
<b>12300 Grant Street, Thornton, CO</b> (Address of principal executive offices)	<b>80241</b> (Zip Code)
<b>Registrant's telephone number including area code: 720-872-5000</b>	

Indicate by check mark whether the issuer (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 definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act:

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

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

As of April 15, 2011, there were 32,367,505 shares of our common stock issued and outstanding.

**Table of Contents**

**ASCENT SOLAR TECHNOLOGIES, INC.**

**Quarterly Report on Form 10-Q**

**Quarterly Period Ended March 31, 2011**

**Table of Contents**

**PART I. FINANCIAL INFORMATION**

<b>Item 1.</b>	<b><u>Condensed Financial Statements (unaudited)</u></b>	<b>3</b>
	<u>Condensed Balance Sheets As of March 31, 2011 and December 31, 2010</u>	3
	<u>Condensed Statements of Operations For the three months ended March 31, 2011 and March 31, 2010 and for the period from inception (October 18, 2005) through March 31, 2011</u>	4
	<u>Condensed Statements of Stockholders Equity and Comprehensive Income (Loss) For the period from inception (October 18, 2005) through March 31, 2011</u>	5
	<u>Condensed Statements of Cash Flows For the three months ended March 31, 2011 and March 31, 2010 and for the period from inception (October 18, 2005) through March 31, 2011</u>	7
	<u>Notes to Condensed Financial Statements</u>	8
<b>Item 2.</b>	<b><u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u></b>	<b>18</b>
<b>Item 3.</b>	<b><u>Quantitative and Qualitative Disclosures About Market Risk</u></b>	<b>22</b>
<b>Item 4.</b>	<b><u>Controls and Procedures</u></b>	<b>23</b>
	<b><u>PART II. OTHER INFORMATION</u></b>	
<b>Item 1A.</b>	<b><u>Risk Factors</u></b>	<b>24</b>
<b>Item 6.</b>	<b><u>Exhibits</u></b>	<b>24</b>
	<b><u>SIGNATURES</u></b>	<b>25</b>
	<b><u>EXHIBIT INDEX</u></b>	<b>26</b>

**Table of Contents****PART I. FINANCIAL INFORMATION****Item 1. Condensed Financial Statements****ASCENT SOLAR TECHNOLOGIES, INC.****(A Development Stage Company)****CONDENSED BALANCE SHEETS****(Unaudited)**

	<b>March 31, 2011</b>	<b>December 31, 2010</b>
<b>ASSETS</b>		
<b>Current Assets:</b>		
Cash and cash equivalents	\$ 16,186,076	\$ 27,303,217
Investments	14,566,987	17,486,409
Trade receivables	895,797	485,026
Related party receivable		2,524
Inventories	3,418,930	1,876,834
Prepaid expenses and other current assets	463,751	510,348
Total current assets	35,531,541	47,664,358
<b>Property, Plant and Equipment:</b>		
Less accumulated depreciation and amortization	(13,031,792)	(10,706,478)
	104,309,712	100,002,842
<b>Other Assets:</b>		
Restricted cash	6,356,383	3,259,350
Deposits on manufacturing equipment	6,971,873	8,770,693
Patents, net of amortization of \$19,304 and \$17,186, respectively	269,407	259,439
Other non-current assets	63,126	64,062
	13,660,789	12,353,544
<b>Total Assets</b>	<b>\$ 153,502,042</b>	<b>\$ 160,020,744</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
<b>Current Liabilities:</b>		
Accounts payable	\$ 1,799,181	\$ 1,092,449
Related party payables	2,049	54,037
Accrued expenses	3,086,470	1,810,851
Accrued property, plant and equipment	3,310,297	2,385,301
Deferred contract revenue	117,162	250,705
Current portion of long-term debt	636,111	232,257
Current portion of long-term debt related party		350,000
Total current liabilities	8,951,270	6,175,600
<b>Long-Term Debt</b>	<b>6,802,636</b>	<b>6,863,129</b>
<b>Long-Term Debt - Related Party</b>		<b>400,000</b>

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<b>Accrued Warranty Liability</b>	20,150	15,900
<b>Commitments and Contingencies (Notes 4, 11 &amp; 17)</b>		
<b>Stockholders' Equity:</b>		
Preferred stock, \$0.0001 par value, 25,000,000 shares authorized, no shares outstanding		
Common stock, \$0.0001 par value, 75,000,000 shares authorized; 32,367,505 and 32,265,587 shares issued and outstanding at March 31, 2011 and December 31, 2010, respectively	3,237	3,226
Additional paid in capital	224,638,795	223,826,191
Deficit accumulated during the development stage	(86,917,665)	(77,263,076)
Accumulated other comprehensive income (loss)	3,619	(226)
Total stockholders' equity	137,727,986	146,566,115
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 153,502,042</b>	<b>\$ 160,020,744</b>

The accompanying notes are an integral part of these condensed financial statements.

Table of Contents

## ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company)

## CONDENSED STATEMENTS OF OPERATIONS

(Unaudited)

	For the Three Months Ended March 31,		For the Period from Inception (October 18,2005) Through March 31, 2011
	2011	2010	
<b>Revenues</b>	\$ 1,183,655	\$ 216,196	\$ 7,631,893
<b>Costs and Expenses</b>			
Research and development	8,595,173	4,558,319	64,159,091
Selling, general and administrative	2,453,868	2,131,105	31,145,370
Impairment loss			1,769,480
<b>Total Costs and Expenses</b>	11,049,041	6,689,424	97,073,941
<b>Loss from Operations</b>	(9,865,386)	(6,473,228)	(89,442,048)
<b>Other Income/(Expense)</b>			
Interest expense			(1,087,293)
Interest income	15,603	12,110	4,433,830
Realized gain on investments	433		27,907
Realized gain (loss) on forward contracts and foreign currency investments	194,761	(142,630)	(850,061)
	210,797	(130,520)	2,524,383
<b>Net Loss</b>	\$ (9,654,589)	\$ (6,603,748)	\$ (86,917,665)
<b>Net Loss Per Share</b> (Basic and diluted)	\$ (0.30)	\$ (0.25)	
<b>Weighted Average Common Shares Outstanding</b> (Basic and diluted)	32,306,837	26,674,109	

The accompanying notes are an integral part of these condensed financial statements.

**Table of Contents****ASCENT SOLAR TECHNOLOGIES, INC.****(A Development Stage Company)****CONDENSED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)****(Unaudited)****For the Period from Inception (October 18, 2005) through March 31, 2011**

	Common Stock		Preferred Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders Equity
	Shares	Amount	Shares	Amount				
<b>Balance at inception, October 18, 2005</b>								
Proceeds from sale of common stock (11/05 @ \$.04 per share)	972,000	\$ 97		\$	\$ 38,783	\$	\$	\$ 38,880
Stock based compensation:								
Founders stock					933,120			933,120
Stock options					26,004			26,004
Net loss						(1,207,234)		(1,207,234)
<b>Balance, December 31, 2005</b>	972,000	\$ 97		\$	\$ 997,907	\$ (1,207,234)	\$	\$ (209,230)
Transfer of assets at historical cost (1/06 @ \$0.03 per share)	1,028,000	103			31,097			31,200
Proceeds from IPO (7/06 @ \$5.50 per unit)	3,000,000	300			16,499,700			16,500,000
IPO costs					(2,392,071)			(2,392,071)
Stock issued to bridge loan lenders (7/06 @ \$2.75 per share)	290,894	29			799,971			800,000
Exercise of stock options (9/06 & 12/06 @ \$0.10 per share)	31,200	3			3,117			3,120
Stock based compensation stock options					348,943			348,943
Net loss						(4,180,912)		(4,180,912)
<b>Balance, December 31, 2006</b>	5,322,094	\$ 532		\$	\$ 16,288,664	\$ (5,388,146)	\$	\$ 10,901,050
Exercise of stock options (1/07 - 12/07 @ \$.10) (7/07 - 12/07 @ \$4.25) (9/07 - 12/07 @ \$2.51 - \$2.76)	169,963	17			346,417			346,434
Conversion of Class A public warrants at \$6.60	3,098,382	310			20,449,011			20,449,321
Redemption of Class A public warrants at \$0.25 per share					(48,128)			(48,128)
Conversion of Class B public warrants at \$11.00 per share	11,000	1			120,999			121,000
Stock based compensation stock options					1,734,879			1,734,879
Proceeds from private placement:								

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Common stock (3/07 @ \$5.77 and 8/07 @ \$7.198)	2,534,462	254		15,962,003		15,962,257
Class B public warrants (8/07 @ \$1.91)				3,754,468		3,754,468
Private placement costs				(75,807)		(75,807)
Exercise of representative warrants (9/07 - 11/07 @ \$6.60 per unit)	300,000	30		1,979,970		1,980,000
Net loss					(6,503,419)	(6,503,419)
<b>Balance, December 31, 2007</b>	11,435,901	\$ 1,144	\$	\$ 60,512,476	\$(11,891,565)	\$ 48,622,055

The accompanying notes are an integral part of these condensed financial statements.



**Table of Contents****ASCENT SOLAR TECHNOLOGIES, INC.****(A Development Stage Company)****CONDENSED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)****(Continued)****(Unaudited)****For the Period from Inception (October 18, 2005) through March 31, 2011**

	Common Stock		Preferred Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders Equity
	Shares	Amount	Shares	Amount				
<b>Balance, December 31, 2007</b>	11,435,901	\$ 1,144		\$	\$ 60,512,476	\$ (11,891,565)	\$	\$ 48,622,055
<b>Components of comprehensive loss</b>								
Unrealized gain on investments							331,068	331,068
Net loss						(13,215,076)		(13,215,076)
<b>Total comprehensive loss</b>								(12,884,008)
Exercise of stock options (1/08 - 12/08 @ \$0.10, \$2.73, \$2.90 & \$4.25)	133,137	13			120,520			120,533
Issuance of Restricted Stock	69,846	7			(7)			
Conversion of Class B public warrants at \$11.00 per share	98,800	10			1,086,790			1,086,800
Stock based compensation					1,881,399			1,881,399
Proceeds from private placement:								
Common stock (3/08 @ \$9.262 & 10/08 @ \$6.176)	4,763,698	476			36,647,217			36,647,693
Class B public warrants (3/08 @ \$3.954)					6,681,884			6,681,884
Exercise of representative s warrants (1/08 @ \$6.60 per unit)	75,000	8			494,992			495,000
Proceeds from shareholder under Section 16(b)					148,109			148,109
Proceeds from secondary public offering (5/08 @ \$14.00)	4,370,000	437			61,179,563			61,180,000
Costs of secondary public offering					(4,361,358)			(4,361,358)
<b>Balance, December 31, 2008</b>	20,946,382	\$ 2,095		\$	\$ 164,391,585	\$ (25,106,641)	\$ 331,068	\$ 139,618,107
<b>Components of comprehensive loss</b>								
Unrealized loss on investments							(334,080)	(334,080)
Net loss						(20,922,717)		(20,922,717)

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**Total comprehensive loss** (21,256,797)

Exercise of stock options (1/09 - 12/09 @ \$0.10, \$2.76 & \$4.25)	105,169	10	339,606	339,616
Issuance of Restricted Stock	147,679	15	(15)	
Stock based compensation			2,676,957	2,676,957
Proceeds from private placement:				
Common stock (10/09 @ \$6.50)	769,230	77	4,999,918	4,999,995
Proceeds from public offering (10/09 @ \$6.50)	4,615,385	461	29,999,542	30,000,003
Costs of public offering			(2,062,866)	(2,062,866)

**Balance, December 31, 2009** 26,583,845 \$ 2,658 \$ 200,344,727 \$ (46,029,358) \$ (3,012) \$ 154,315,015

**Components of comprehensive loss**

Unrealized loss on investments				2,786	2,786
Net loss			(31,233,718)		(31,233,718)

**Total comprehensive loss** (31,230,932)

Proceeds from public offering (11/11 @ \$4.15)	5,250,000	525	21,786,975	21,787,500
Costs of public offering			(1,409,937)	(1,409,937)
Exercise of stock options (1/10 12/10 @ \$0.10, \$2.90, \$2.73, \$2.76 & \$3.17)	161,330	16	390,985	391,001
Issuance of Restricted Stock	270,412	27	(27)	
Stock based compensation			2,713,468	2,713,468

**Balance, December 31, 2010** 32,265,587 \$ 3,226 \$ 223,826,191 \$ (77,263,076) \$ (226) \$ 146,566,115

**Components of comprehensive loss**

Unrealized loss on investments				3,845	3,845
Net loss			(9,654,589)		(9,654,589)

**Total comprehensive loss** (9,650,744)

Costs of public offering			(4,859)	(4,859)
Exercise of stock options (1/11 3/11 @ \$0.10)	55,000	6	5,494	5,500
Issuance of Restricted Stock	46,918	5	(5)	
Stock based compensation			811,974	811,974

**Balance, March 31, 2011** 32,367,505 \$ 3,237 \$ 224,638,795 \$ (86,917,665) \$ 3,619 \$ 137,727,986

The accompanying notes are an integral part of these condensed financial statements.

**Table of Contents****ASCENT SOLAR TECHNOLOGIES, INC.****(A Development Stage Company)****CONDENSED STATEMENTS OF CASH FLOWS****(Unaudited)**

	For the Three Months Ended March 31,		For the Period from inception (October 18, 2005) through March 31, 2011
	2011	2010	
<b>Operating Activities:</b>			
Net loss	\$ (9,654,589)	\$ (6,603,748)	\$ (86,917,665)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	2,328,369	994,843	13,133,431
Stock based compensation	811,974	520,027	11,126,744
Realized loss (gain) on forward contracts and foreign currency investments	(194,761)	142,630	850,061
Charge off of deferred financing costs to interest expense			198,565
Charge off of bridge loan discount to interest expense			800,000
Impairment loss			1,769,480
Forfeited down payments on equipment			74,766
Changes in operating assets and liabilities:			
Accounts receivable	(410,771)	16,163	(895,797)
Related party receivables	2,524	(1,256)	
Inventories	(1,542,096)		(3,418,930)
Prepaid expenses and other current assets	46,597	106,733	(463,751)
Accounts payable	708,782	(210,112)	1,801,230
Related party payable	(54,037)	(96,963)	
Accrued expenses	548,127	(650,906)	2,358,978
Deferred contract revenue	(133,543)		117,162
Warranty reserve	4,250		20,150
Net cash used in operating activities	(7,539,174)	(5,782,589)	(59,445,576)
<b>Investing Activities:</b>			
Purchases of available-for-sale-securities	(13,848,658)	(25,880,603)	(892,113,091)
Maturities and sales of available-for-sale securities	16,771,924	43,411,040	877,549,724
Purchase of property, plant and equipment	(2,986,116)	(702,260)	(41,885,405)
Deposits on manufacturing equipment		(2,367,495)	(79,948,708)
Restricted cash for manufacturing equipment	(3,097,033)		(6,356,383)
Patent activity costs	(12,086)	(32,456)	(263,754)
Deposit on building			(100,000)
Net cash provided by (used in) investing activities	(3,171,969)	14,428,226	(143,117,617)
<b>Financing Activities:</b>			
Proceeds from bridge loan financing			1,600,000
Repayment of bridge loan financing			(1,600,000)
Payment of debt financing costs			(273,565)
Payment of equity offering costs	(4,859)		(10,306,899)
Proceeds from debt			7,700,000
Repayment of debt	(406,639)	(53,031)	(661,253)
Repayment of debt-related party		(350,000)	(700,000)
Proceeds from shareholder under Section 16(b)			148,109

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Proceeds from issuance of stock and warrants	5,500	395,766	222,891,005
Redemption of Class A warrants			(48,128)
Net cash provided by (used in) financing activities	(405,998)	(7,265)	218,749,269
<b>Net change in cash and cash equivalents</b>	<b>(11,117,141)</b>	<b>8,638,372</b>	<b>16,186,076</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>27,303,217</b>	<b>21,717,215</b>	
<b>Cash and cash equivalents at end of period</b>	<b>\$ 16,186,076</b>	<b>\$ 30,355,587</b>	<b>\$ 16,186,076</b>
<b>Supplemental Cash Flow Information:</b>			
Cash paid for interest	\$	\$	\$ 424
Cash paid for income taxes	\$	\$	\$
<b>Non-Cash Transactions:</b>			
ITN initial contribution of assets for equity	\$	\$	\$ 31,200
Note with ITN and related capital expenditures	\$	\$ 1,100,000	\$ 1,100,000

The accompanying notes are an integral part of these condensed financial statements.

**Table of Contents**

**ASCENT SOLAR TECHNOLOGIES, INC.**

**(A Development Stage Company)**

**NOTES TO CONDENSED FINANCIAL STATEMENTS**

**(Unaudited)**

**NOTE 1. ORGANIZATION**

Ascent Solar Technologies, Inc. (Ascent or the Company) was incorporated on October 18, 2005 from the separation by ITN Energy Systems, Inc. (ITN) of its Advanced Photovoltaic Division and all of that division's key personnel and core technologies. ITN, a private company incorporated in 1994, is an incubator dedicated to the development of thin-film, photovoltaic (PV) battery, fuel cell and nano technologies. Through its work on research and development contracts for private and governmental entities, ITN developed proprietary processing and manufacturing know-how applicable to PV products generally, and to Copper-Indium-Gallium-diSelenide (CIGS) PV products in particular. ITN formed Ascent to commercialize its investment in CIGS PV technologies. In January 2006, in exchange for 1,028,000 shares of common stock of Ascent, ITN assigned to Ascent certain CIGS PV technologies and trade secrets and granted to Ascent a perpetual, exclusive, royalty-free worldwide license to use, in connection with the manufacture, development, marketing and commercialization of CIGS PV to produce solar power, certain of ITN's existing and future proprietary and control technologies that, although non-specific to CIGS PV, Ascent believes will be useful in its production of PV modules for its target markets. Upon receipt of the necessary government approvals and pursuant to novation in early 2007, ITN assigned government-funded research and development contracts to Ascent and also transferred the key personnel working on the contracts to Ascent. Today, ITN still provides Ascent a limited amount of technical services.

**NOTE 2. BASIS OF PRESENTATION**

The Company's activities to date have consisted substantially of raising capital, research and development, establishment of its initial production line (FAB1) and development of its expansion plant (FAB2). Revenues to date have been primarily generated from the Company's governmental research and development (R&D) contracts and have not been significant. The Company's planned principal operations to commercialize flexible PV modules have commenced, but have generated limited revenue to date. Accordingly, the Company is considered to be in the development stage and has presented its financial statements under the provisions of *ASC Topic 915 - Development Stage Entities* which requires additional disclosure of inception to date activity in the Condensed Statements of Operations, Condensed Statements of Stockholders' Equity and Comprehensive Income (Loss) and Condensed Statements of Cash Flows.

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) for interim financial information and in accordance with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, these interim financial statements do not include all of the information and footnotes typically found in U.S. GAAP audited annual financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair statement have been included. The Condensed Balance Sheet at December 31, 2010 has been derived from the audited financial statements as of that date but does not include all of the information and footnotes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010. These condensed financial statements and notes should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Operating results for the three months ended March 31, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011.

**NOTE 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The Company's significant accounting policies were described in Note 3 to the audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010. With the exception of those discussed below, there have been no significant changes to these policies and no recent accounting pronouncements or changes in accounting pronouncements during the three months ended March 31, 2011, that are of significance or potential significance to the Company.

**Recent Accounting Pronouncements:** In April 2010, the FASB issued ASU 2010-17, *Revenue Recognition - Milestone Method (Topic 605)*. This ASU requires new disclosures and provides a consistent framework for applying the milestone method of revenue recognition. ASU

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2010-17 states that a vendor may recognize consideration that is contingent upon achievement of a milestone in its entirety as revenue in the period in which the milestone is achieved only if the milestone meets all criteria to be considered

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## **Table of Contents**

substantive. Determining whether a milestone is substantive is a matter of judgment made at the inception of the arrangement. ASU 2010-17 is effective on a prospective basis for milestones achieved in fiscal years, and interim periods within those years, beginning on or after June 15, 2010; early adoption is permitted. The adoption of ASU 2010-17 did not have a material impact on the Company's financial position, results of operations or cash flows.

### **NOTE 4. LIQUIDITY AND CONTINUED OPERATIONS**

As of March 31, 2011, the Company had approximately \$30.8 million in cash and investments. An additional \$6.4 million in cash is restricted for future payments on equipment. As discussed in Note 2, the Company is in the development stage and is currently incurring significant losses from operations as it continues to ramp up production. The Company made cash payments of approximately \$3.0 million in the first quarter 2011 for property, plant and equipment. The Company expects to make payments on equipment for the FAB2 production line of approximately \$6.3 million (included in Restricted Cash) during the remaining three quarters of 2011. The remaining obligation for equipment beyond 2011 is approximately \$6.5 million.

On March 31, 2011, the Company announced a change in strategy that will focus the Company's solar module technology on applications for emerging and specialty markets. The change in strategy resulted in a change in leadership and sizing the company to a new cost structure, primarily through the termination of a portion of the Company's workforce. The Company incurred a charge of approximately \$450,000 in the quarter ended March 31, 2011, comprised of severance costs. This charge has been recorded under Accrued expenses in the Condensed Balance Sheets and expensed as Research and development and Selling, general and administrative in the Condensed Statement of Operations in the amounts of approximately \$72,000 and \$378,000, respectively. The Company expects to make payments of approximately \$185,000 during the quarter ended June 30, 2011, and the remaining estimated amount of \$265,000 over the following ten months. The Company expects the actions taken to reduce monthly operating costs to approximately \$1.6 million per month.

The Company commenced limited production on the FAB1 production line in the first quarter of 2009 and the FAB2 production line in 2010. The Company does not expect that sales revenue and cash flows from the FAB1 and FAB2 production lines will be sufficient to support operations and cash requirements until actual full production capacity on the FAB2 production line is achieved.

The Company expects current cash and investments will be sufficient to fund operations and capital expenditures for the next twelve months. Changes in the level of expected operating losses, the timing of planned capital expenditures or other factors may negatively impact cash flows and reduce current cash and investments faster than anticipated. The Company may need to raise additional capital in the future. There is no assurance that we will be able to raise additional capital on acceptable terms or at all.

### **NOTE 5. RESTRICTED CASH**

The Company established irrevocable letters of credit with its bank in favor of equipment vendors in the approximate amount of \$3.3 million and \$3.1 million in October 2010 and February 2011, respectively. The letters of credit are collateralized by interest bearing accounts and the funds are expected to be released for payment during 2011. Both amounts are reflected as Restricted cash under Other Assets in the Condensed Balance Sheets.

### **NOTE 6. FAIR VALUE MEASUREMENTS**

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, to measure fair value:

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

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.



**Table of Contents**

The following table represents the Company's fair value hierarchy for its financial assets measured at fair value on a recurring basis and its classification on the balance sheet as of March 31, 2011:

	Level 1	Level 2	Level 3	Total	Cash Equivalents	Investments
<b>Financial Assets:</b>						
U.S. government securities	\$	\$ 12,667,669	\$	\$ 12,667,669	\$	\$ 12,667,669
Money market funds	717,854			717,854	717,854	
Corporate securities		5,048,980		5,048,980	3,149,662	1,899,318
	\$ 717,854	\$ 17,716,649	\$	\$ 18,434,503	\$ 3,867,516	\$ 14,566,987

As of the balance sheet date, the Company held securities issued by U.S. government agencies (AAA/Aaa ratings) and A-1/A-1+ rated corporate notes. Approximately \$17.7 million of these securities are classified as Level 2 because the Company does not believe that it is possible to obtain a firm, up-to-date price of such securities from, for example, a major exchange; and as a result, the Company relies on its brokerage firm and investment manager to report its fair value of such securities at the end of each month. Investments have not been transferred between levels.

**NOTE 7. INVESTMENTS**

Securities held by the Company as of March 31, 2011 are classified as available-for-sale and consisted of U.S. government securities and corporate securities. Such investments are carried at fair value, based on quoted market prices with the unrealized holding gains and losses reported as Accumulated other comprehensive income (loss) in the stockholders' equity section of the Condensed Balance Sheets. Realized gains and losses on sales of securities are computed using the specific identification method. The Company evaluates declines in market value for potential impairment. If the decline results in a value below cost and is determined to be other than temporary, the investment is written down to its impaired value and a new cost basis is established. A summary of available-for-sale securities as of March 31, 2011 is as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government securities	\$ 12,663,870	\$ 3,964	\$ (165)	\$ 12,667,669
Corporate securities	1,899,509		(191)	1,899,318
<b>Total</b>	<b>\$ 14,563,379</b>	<b>\$ 3,964</b>	<b>\$ (356)</b>	<b>\$ 14,566,987</b>

Contractual maturities of available-for-sale investments as of March 31, 2011 were all one year or less as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	\$ 14,563,379	\$ 3,964	\$ (356)	\$ 14,566,987

The Company typically invests in highly rated securities with low probabilities of default. The Company's investment policy specifies minimum investment grade criteria, types of acceptable investments, concentration limitations and duration guidelines.

All securities having an unrealized loss as of March 31, 2011 have been in a loss position for less than twelve months.

**NOTE 8. ACCOUNTS RECEIVABLE**

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Accounts receivable consist of amounts generated from government contracts and sales of PV modules. Accounts receivable totaled \$895,797 and \$485,026 as of March 31, 2011 and December 31, 2010, respectively. All accounts receivable as of March 31, 2011 are deemed collectible.

*Provisional Indirect Cost Rates* During 2010 and 2011, the Company billed the government under cost-based R&D contracts at provisional billing rates which permit the recovery of indirect costs. These rates are subject to audit on an annual basis by the government agencies cognizant audit agency. The cost audit will result in the negotiation and determination of the final indirect cost rates. In the opinion of management, re-determination of any cost-based contracts will not have a material effect on the Company's financial position or results of operations.

**Table of Contents**

*Contract Status* The Company has authorized but not completed contracts on which work is in process as follows as of March 31, 2011 and December 31, 2010:

	As of March 31, 2011	As of December 31, 2010
Total contract price of initial contract awards, including exercised options and approved change orders (modifications)	\$ 11,427,581	\$ 11,426,858
Completed to date	(8,171,504)	(7,289,426)
Authorized backlog	\$ 3,256,077	\$ 4,137,432

**NOTE 9. PROPERTY, PLANT AND EQUIPMENT**

The following table summarizes property, plant and equipment as of March 31, 2011 and December 31, 2010:

	As of March 31, 2011	As of December 31, 2010
Building	\$ 19,506,814	\$ 19,506,814
Furniture, fixtures, computer hardware and computer software	1,151,745	1,151,745
Manufacturing machinery and equipment	78,688,610	72,111,366
Leasehold improvements	884,709	884,709
Net depreciable property, plant and equipment	100,231,878	93,654,634
Manufacturing machinery and equipment in progress	17,109,626	17,054,686
Property, plant and equipment	117,341,504	110,709,320
Less: Accumulated depreciation and amortization	(13,031,792)	(10,706,478)
Net property, plant and equipment	\$ 104,309,712	\$ 100,002,842

As of March 31, 2011, approximately \$17.1 million of equipment for the FAB2 production line is reflected above as Manufacturing machinery and equipment in progress until the Company completes qualification of the equipment. Depreciation and amortization expense for the three months ended March 31, 2011 and 2010 was \$2,325,314 and \$993,564, respectively. Depreciation and amortization expense is recorded under Research and development expense and Selling, general and administrative expense in the Condensed Statements of Operations.

The Company incurred and capitalized interest costs related to the FAB2 building loan as follows during the three months ended March 31, 2011 and the year ended December 31, 2010.

	As of March 31, 2011	As of December 31, 2010
Interest cost incurred	\$ 117,701	\$ 479,898
Interest cost capitalized	(117,701)	(479,898)
Interest expense, net	\$	\$

**NOTE 10. INVENTORIES**

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Inventories consisted of the following at March 31, 2011 and December 31, 2010:

	As of March 31, 2011	As of December 31, 2010
Raw materials	\$ 2,789,721	\$ 1,468,425
Work in process	354,573	317,468
Finished goods	274,636	90,941
Total	\$ 3,418,930	\$ 1,876,834

### NOTE 11. DEPOSITS ON MANUFACTURING EQUIPMENT

As of March 31, 2011, deposits on manufacturing equipment related to the purchase of equipment not yet delivered to the FAB2 production line were approximately \$7.0 million. The equipment purchase agreements are conditional purchase obligations that have milestone-based deliverables, such as the Company's acceptance of design requirements and successful installation and commissioning of the equipment.

**Table of Contents****NOTE 12. DEBT**

On February 8, 2008, the Company acquired an approximately 120,000 square foot manufacturing and office facility in Thornton, Colorado, for approximately \$5.5 million. The purchase was financed by a promissory note, deed of trust and construction loan agreement (the Construction Loan ) with the Colorado Housing and Finance Authority ( CHFA ), which provided the Company borrowing availability of up to \$7.5 million for the building and building improvements. The Company paid approximately \$1.3 million in cash and was advanced approximately \$4.2 million from CHFA to fund the initial acquisition of the property. The Construction Loan terms required payments of interest at 6.6% on the outstanding balance. On January 29, 2009, the Construction Loan was converted to a permanent loan pursuant to a Loan Modification Agreement between the Company and CHFA (the Permanent Loan ). The Permanent Loan has an interest rate of 6.6% and the principal will be amortized over a period of approximately 19 years and one month consistent with a maturity date of 20 years after the incurrence of the promissory note and Construction Loan. A loan commitment fee of \$75,000 was paid in 2008 and is reflected on the balance sheet in non-current assets. This fee is being amortized into interest expense over the 20 year life of the Loan. The Company will incur a prepayment penalty if the Permanent Loan is prepaid prior to December 31, 2015 equal to the sum of (i) the present value of the total principal and interest payments due under the Note from the prepayment date to December 31, 2015, and (ii) the present value of the remaining principal balance of the Note that would have been due as of December 31, 2015, less the principal amount of the Note outstanding. Further, pursuant to certain negative covenants contained in the deed of trust associated with the Permanent Loan, until the Permanent Loan is repaid and all of the Company s secured obligations are performed in full, the Company may not, among other things, without CHFA s prior written consent (which by the terms of the deed of trust is subject to a reasonableness requirement): create or incur additional indebtedness (other than obligations created or incurred in the ordinary course of business); merge or consolidate with any other entity; or make loans or advances to the Company s officers, shareholders, directors or employees.

On January 7, 2010, the Company and ITN entered into an equipment purchase agreement whereby the Company purchased seven research and development vacuum and deposition chambers for \$1,100,000 from ITN. Payments in the amount of \$350,000 were remitted to ITN in January 2010 and January 2011. A final payment, without interest, in the amount of \$400,000 is due on January 15, 2012.

As of March 31, 2011, future principal payments are due as follows:

2011	\$ 175,618
2012	648,059
2013	264,935
2014	282,960
2015	302,210
Thereafter	5,764,965
	<b>\$ 7,438,747</b>

**NOTE 13. DERIVATIVE FINANCIAL INSTRUMENTS**

The Company is actively engaged in purchasing manufacturing equipment internationally and is exposed to foreign currency risk. In July 2008 and March 2009, the Company entered into fair value hedges utilizing forward contracts designed to match scheduled contractual payments to equipment suppliers which are denominated in Euros and Yen. The total notional value of the Euro forward contracts was approximately 6.4 million with various contract settlement dates beginning September 15, 2008 through July 31, 2009. The total notional value of the Yen forward contracts was approximately ¥521.4 million with contract settlement dates of March and April 2009. The Company elected not to use hedge accounting and accordingly, the unrealized gain and loss on each forward contract was determined at each balance sheet date based upon current market rates and is reported as an Unrealized gain or loss on forward contracts in the Condensed Statements of Operations. Upon settlement of the forward contracts, a realized gain or loss is reported in the Condensed Statements of Operations as Realized gain (loss) on forward contracts and foreign currency investments.

Although the hedging activity is designed to fix the dollar amount to be expended, the asset purchased is recorded at the spot rate in effect as of the date of the payment to the supplier. The difference between the spot rate and the forward rate has been reported as a gain or loss on forward contracts. As of March 31, 2011, the Company held two foreign currency options hedging approximately \$1.7 million in equipment payments to be remitted in Yen. Derivative financial instruments are not used for speculative or trading purposes.

Included in Restricted cash at March 31, 2011 is \$3.1 million in Euros. Accounts denominated in Euros are held in the Company s bank account for future payments to equipment suppliers. Period end foreign currency transaction adjustments related to the Euros on deposit in the Company s

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bank account are reflected as Realized gain (loss) on forward contracts and foreign currency investments in the Condensed Statements of Operations.

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**Table of Contents**

**NOTE 14. STOCKHOLDERS' EQUITY**

The Company's authorized capital stock consists of 75,000,000 shares of common stock, \$0.0001 par value, and 25,000,000 shares of preferred stock, \$0.0001 par value. Each share of common stock has the right to one vote.

Preferred stock, \$0.0001 par value per share, may be issued in classes or series. Designations, powers, preferences, rights, qualifications, limitations and restrictions are determined by the Company's Board of Directors.

**Initial Public Offering:** The Company completed its initial public offering (IPO) of 3,000,000 units on July 14, 2006. Each unit consisted of one share of common stock, one redeemable Class A warrant and two non-redeemable Class B warrants. The IPO price was \$5.50 per unit. The gross proceeds of the offering were \$16,500,000. Ascent's net proceeds from the offering, after deducting the underwriter's discount of \$1,097,250 and other fees and expenses, aggregated approximately \$14,000,000.

The common stock and Class A and Class B warrants traded only as a unit through August 9, 2006, after which the common stock, the Class A warrants and the Class B warrants began trading separately.

*Class A warrants.* On May 24, 2007, the Company publicly announced that it intended to redeem its outstanding Class A warrants. The Class A warrants became eligible for redemption by the Company at \$0.25 per warrant on April 16, 2007, when the last reported sale price of the Company's common stock had equaled or exceeded \$9.35 for five consecutive trading days. There were 3,290,894 Class A warrants issued in connection with the Company's IPO, including the warrants issued to the Bridge Noteholders. The Class A warrants were exercisable at a price of \$6.60 per share.

The exercise period ended June 22, 2007. During the exercise period, 3,098,382 Class A warrants (94.1% of the total outstanding) were exercised for an equal number of shares of common stock, and the Company received \$20,449,321 in proceeds from the warrant exercises. At the end of the exercise period, 192,512 Class A warrants remained outstanding. The Company has set aside funds with its warrant transfer agent to redeem the outstanding warrants for \$0.25 per warrant, or a total cost of \$48,128. As of March 31, 2011, 9,090 Class A warrants remained unredeemed.

*Class B warrants.* The Class B warrants included in the units became exercisable on August 10, 2006. The exercise price of a Class B public warrant is \$11.00. The Class B warrants expire on July 10, 2011. The Company does not have the right to redeem the Class B warrants. During the years ended December 31, 2008 and 2007, 98,800 and 11,000 Class B warrants, respectively were exercised resulting in proceeds to the Company of approximately \$1.09 million and \$121,000 respectively. As of March 31, 2011, 10,502,583 Class B warrants were outstanding.

*IPO warrants.* Warrants to purchase 300,000 units at \$6.60 were issued to underwriters of the Company's IPO in July 2006 (representative's warrants). A unit consists of one share of common stock, one Class A redeemable warrant and two Class B non-redeemable warrants. The warrants expire on July 10, 2011. Upon exercise of the representative's warrants, holders will be forced to choose whether to exercise the underlying Class A warrants or hold them for redemption. As noted above, on June 25, 2007, any Class A warrants then outstanding expired and became redeemable.

Representative's warrants to purchase 150,000 units have been exercised as of December 31, 2007, as have the 150,000 underlying Class A warrants resulting in an issuance of 300,000 shares of common stock and 300,000 Class B warrants for total proceeds to the Company of \$1.98 million. During the year ended December 31, 2008 an additional 37,500 units were exercised, as have the 37,500 underlying Class A warrants resulting in an issuance of 75,000 shares of common stock and 75,000 Class B warrants for total proceeds to the Company of \$495,000. To the extent that holders of representative's warrants are entitled to receive Class A warrants upon exercise of the representative's warrants, those warrants will be immediately subject to call for redemption at \$0.25 per warrant. The holders will then have to decide whether to exercise their Class A warrants or hold them for redemption. As of March 31, 2011, 112,500 representative's warrants remained unexercised.

**Private Placement of Securities:** The Company completed a private placement of securities with Norsk Hydro Produksjon AS (Hydro) in March 2007. Hydro is a subsidiary of Norsk Hydro ASA. Hydro purchased 1,600,000 shares of the Company's common stock (representing 23% of the Company's then outstanding common stock post transaction) for an aggregate purchase price of \$9,236,000. The Company recorded \$75,807 of costs associated with the private placement as a reduction to Additional paid in capital on the Company's Balance Sheets. In connection with the private placement, Hydro was granted options to purchase additional shares and warrants.

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**Table of Contents**

In August 2007, Hydro acquired an additional 934,462 shares of the Company's common stock and 1,965,690 Class B warrants through the exercise of an option previously granted to Hydro and approved by Ascent's stockholders in June 2007. Gross proceeds to the Company were \$10.48 million, and reflected per share and per warrant purchase prices equal to the average of the closing bids of each security, as reported by NASDAQ, for the five consecutive trading days preceding exercise. After acquiring these additional shares, Hydro again held 23% of the then outstanding common shares, after its holdings were diluted as the result of the redemption of Class A warrants and 23% of total outstanding Class B warrants. Pursuant to a second option that was approved by Ascent's stockholders in June 2007, beginning December 13, 2007, Hydro was entitled to purchase additional shares and Class B warrants up to a maximum of 35% of each class of security.

In March 2008, Hydro acquired an additional 2,341,897 shares of the Company's common stock and 1,689,905 Class B warrants through the exercise of the second option previously granted to Hydro and approved by Ascent's stockholders in June 2007, resulting in Hydro ownership of approximately 35% of each class of security. Gross proceeds to the Company were \$28.4 million, and reflected per share and per warrant purchase prices were equal to the average of the closing bids of each security, as reported by NASDAQ, for the five consecutive trading days preceding exercise. As a result of the Company's Secondary Public Offering in May 2008, Hydro's holdings were diluted to approximately 27% of the then outstanding common stock.

On October 8, 2008, Hydro acquired an additional 2,421,801 shares of the Company's common stock. The purchase resulted in a return to Hydro's ownership of approximately 35% of the Company's then outstanding common stock. Gross proceeds to the Company from the follow on investment were approximately \$15 million, and reflect per share purchase prices equal to the average of the closing bids of each security, as reported by NASDAQ, for the five consecutive trading days preceding the purchase. Until June 15, 2009, the second option entitles Hydro to purchase from the Company additional restricted shares of common stock and Class B warrants to maintain ownership of up to 35% of issued and outstanding common stock and Class B warrants.

On September 29, 2009, the Company entered into a securities purchase agreement with Hydro under which the Company agreed to sell, and Hydro agreed to purchase, 769,230 restricted shares of the Company's common stock for approximately \$5.0 million in a private placement exempt from registration under the Securities Act. The restricted shares were sold to Hydro at a per share price equal to \$6.50. The private placement closed on October 6, 2009, at which time the Company and Hydro executed a Registration Rights Agreement, pursuant to which Hydro was granted demand and piggy-back registration rights.

**Secondary Public Offerings:** On May 15, 2008, the SEC declared effective the Company's Registration Statement on Form S-3 (Reg. No. 333-149740), and the Company completed a secondary public offering of 4,370,000 shares of common stock, which included 570,000 shares issued upon the underwriter's exercise of their overallotment in full. The offering price of \$14.00 per share resulted in proceeds of \$61.2 million. After deducting underwriting discounts and commissions and offering expenses of approximately \$4.4 million, net proceeds to the Company were approximately \$56.8 million.

On October 1, 2009, the Company entered into an underwriting agreement with Barclays Capital Inc. providing for the sale in a firm commitment offering of 4,615,385 shares of the Company's common stock at a price to the public of \$6.50 per share. The offer and sale of the shares were registered under the Securities Act of 1933, as amended, pursuant to the Company's Registration Statement on Form S-3 (File No. 333-156665), which became effective with the SEC on January 16, 2009. The offering closed on October 6, 2009 with net proceeds to the Company of approximately \$27.9 million.

On November 11, 2010, the Company entered into an underwriting agreement with Cowen and Company, LLC, Rodman & Renshaw LLC and ThinkEquity LLC providing for the sale in a firm commitment offering of 5,250,000 shares of the Company's common stock at a price to the public of \$4.15 per share. The offer and sale of the shares were registered under the Securities Act of 1933, as amended, pursuant to the Company's Registration Statement on Form S-3 (File No. 333-156665), which became effective with the SEC on January 16, 2009. The offering closed on November 16, 2010 with net proceeds to the Company of approximately \$20.4 million.

On February 28, 2011, the Company entered into an At-The-Market Equity Offering Sales Agreement with Stifel, Nicolaus & Company, Incorporated, or Stifel Nicolaus Weisel, under which the Company may issue and sell from time to time up to \$25,000,000 of common stock. The Company filed a prospectus supplement to the prospectus dated January 16, 2009. Sales of common stock, if any, will be made at market prices by any method that is deemed to be an at the market offering as defined in Rule 415 under the Securities Act, including sales made directly on the NASDAQ Global Market and any other trading market for the Company's common stock, and sales to or through a market maker other than on an exchange. The aggregate compensation payable to Stifel Nicolaus Weisel as sales agent shall be equal to 3% of the gross sales price of the shares sold. The offering of common stock pursuant to the sales agreement will terminate upon the earlier of (1) the sale of all the shares of our common stock offered by this prospectus supplement and the accompanying prospectus or (2) the termination of the sales agreement by the Company or by Stifel Nicolaus Weisel. As of March 31, 2011, no shares had been sold under this facility.





**Table of Contents**

**Other Proceeds:** During the three months ended March 31, 2008, the Company received proceeds from a greater than 10% stockholder equal to the profits realized by such stockholder on the sale of the Company's stock that was purchased and sold by such stockholder within six months of such sale. Under Section 16(b) of the Securities Exchange Act of 1934, as amended, the profit realized from this transaction by the greater than 10% stockholder was required be disgorged to the Company. The Company recorded the proceeds received on this transaction of \$148,109 as Additional paid in capital and is reflected on the Statements of Stockholders' Equity.

As of March 31, 2011, the Company had 32,367,505 shares of common stock and no shares of preferred stock outstanding. The Company has not declared or paid any dividends through March 31, 2011.

**NOTE 15. EQUITY PLANS AND SHARE-BASED COMPENSATION**

**Stock Option Plan:** The Company's 2005 Stock Option Plan, as amended (the "Stock Option Plan") provides for the grant of incentive or non-statutory stock options to the Company's employees, directors and consultants. Upon recommendation of the Board of Directors, the stockholders approved an increase in the total shares of common stock reserved for issuance under the Stock Option Plan at various times from 1,000,000 to 3,700,000 currently.

**Restricted Stock Plan:** The Company's 2008 Restricted Stock Plan, as amended (the "Restricted Stock Plan") was adopted by the Board of Directors and was approved by the stockholders on July 1, 2008. The Restricted Stock Plan initially reserved up to 750,000 shares of the Company's common stock for restricted stock awards and restricted stock units to eligible employees, directors and consultants of the Company. Upon recommendation of the Board of Directors, the stockholders approved an increase in the total shares of common stock reserved for issuance under the Restricted Stock Plan from 750,000 to 1,550,000 shares.

The Stock Option Plan and the Restricted Stock Plan are administered by the Compensation Committee of the Board of Directors, which determines the terms of the option and share awards, including the exercise price, expiration date, vesting schedule and number of shares. The term of any incentive stock option granted under the Stock Option Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of the Company's voting stock. The exercise price of an incentive stock option granted under the Option Plan must be equal to or greater than the fair market value of the shares of the Company's common stock on the date the option is granted. An incentive stock option granted to an optionee owning more than 10% of the Company's voting stock must have an exercise price equal to or greater than 110% of the fair market value of the Company's common stock on the date the option is granted. The exercise price of a non-statutory option granted under the Option Plan must be equal to or greater than 85% of the fair market value of the shares of the Company's common stock on the date the option is granted.

**Grants Outside Existing Equity Plans:** Prior to the adoption of the Restricted Stock Plan, the Board of Directors granted 40,000 restricted stock awards in connection with an executive employment agreement. In July 2009, the Board of Directors granted an inducement award (as defined in NASDAQ Rule 5635(c) (4)) made outside of the existing Stock Option Plan for 200,000 stock options.

**Share Based Compensation:** The Company measures share-based compensation cost at the grant date based on the fair value of the award and recognizes this cost as an expense over the grant recipients' requisite service periods for all awards made to employees, officers, directors and consultants.

The share-based compensation expense recognized in the Condensed Statements of Operations for the three months ended March 31, 2011 and 2010 was as follows:

	For the three months ended March 31,	
	2011	2010
<b>Share-based compensation cost included in:</b>		
Research and development	\$ 186,091	\$ 100,457
Selling, general and administrative	625,883	419,570
Total share-based compensation cost	\$ 811,974	\$ 520,027

**Table of Contents**

The following table presents share-based compensation expense by type of award for the three months ended March 31, 2011 and 2010:

<b>Type of Award:</b>	<b>For the three months ended March 31,</b>	
	<b>2011</b>	<b>2010</b>
Stock Options	\$ 537,793	\$ 271,376
Restricted Stock Units and Awards	274,181	248,651
Total share-based compensation cost	\$ 811,974	\$ 520,027

**Stock Options:** The Company recognized share-based compensation expense for stock options of approximately \$538,000 (approximately \$500,000 to officers, directors and employees, and approximately \$38,000 to outside providers) for the three months ended March 31, 2011 related to stock option awards ultimately expected to vest and reduced for estimated forfeitures. Included in this amount is approximately \$236,000 in additional expense due to accelerated vesting, resulting from the severance agreement with the Company's former CEO, Dr. Farhad Moghadam. The weighted average estimated fair value of employee stock options granted for the three months ended March 31, 2011 and 2010 was \$2.56 and \$3.50 per share, respectively. Fair value was calculated using the Black-Scholes Model with the following assumptions:

	<b>For the three months ended March 31,</b>	
	<b>2011</b>	<b>2010</b>
Expected volatility	97.84%	102.1%
Risk free interest rate	2.6%	2.6%
Expected dividends		
Expected life (in years)	6.3	6.2

Expected volatility is based on the historical volatility of the Company's stock. The risk-free rate of return is based on the yield of U.S. Treasury bonds with a maturity equal to the expected term of the award. Historical data is used to estimate forfeitures within the Company's valuation model. The Company's expected life of stock option awards is derived from historical experience and represents the period of time that awards are expected to be outstanding.

As of March 31, 2011, total compensation cost related to non-vested stock options not yet recognized was approximately \$1,993,000 (approximately \$1,988,000 to officers, directors and employees, and approximately \$5,000 to outside providers), which is expected to be recognized over a weighted average period of approximately 2.8 years. As of March 31, 2011, approximately 1,575,000 shares were vested or expected to vest in the future at a weighted average exercise price of \$4.67. As of March 31, 2011, approximately 1,487,000 shares remained available for future grants under the Option Plan.

**Restricted Stock:** In addition to the stock options discussed above, the Company recognized share-based compensation expense related to restricted stock grants of approximately \$274,000 for the three months ended March 31, 2011. Included in this amount is approximately \$40,000 in additional expense due to accelerated vesting, resulting from the severance agreement with the Company's former CEO, Dr. Farhad Moghadam. The weighted average estimated fair value of restricted stock grants for the three months ended March 31, 2011 and 2010 was \$3.21 and \$4.82, respectively.

Total unrecognized share-based compensation expense from unvested restricted stock as of March 31, 2011 was approximately \$1,135,000 (approximately \$1,130,000 to officers, directors and employees, and approximately \$5,000 to outside providers) which is expected to be recognized over a weighted average period of approximately 2.03 years. As of March 31, 2011, approximately 444,000 shares were expected to vest in the future. As of March 31, 2011, approximately 578,000 shares remained available for future grants under the Restricted Stock Plan.

**NOTE 16. RELATED PARTY TRANSACTIONS**

Prior to January 1, 2011, ITN was considered a related party because ITN's sole owner, Dr. Mohan Misra, was Chairman of the Company's Board of Directors and held various executive positions. Effective January 1, 2011, Dr. Misra was no longer a member of the Board of Directors or an executive of the Company and ITN is no longer considered a related party.

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ITN was a related party during the three months ended March 31, 2010. Included in Selling, general and administrative expense for the three months ended March 31, 2010 is \$175,982 of expenditures to ITN for facility sublease costs and administrative support expenses. Included in Research and development expense for the three months ended March 31, 2010 is \$160,055 of

## **Table of Contents**

expenditures to ITN for supporting research and development and manufacturing activity, including charges for the use of research and development equipment. Related party payables of \$54,037 as of December 31, 2010 represent costs remaining to be paid to ITN for these expenditures. Related party receivables \$2,524 as of December 31, 2010 represent pass-through costs for employee benefit insurance.

Property, plant and equipment as of December 31, 2010 includes \$2,296,118 paid to ITN for the construction of manufacturing and research and development equipment and installation labor costs for the Company's FAB1 and FAB2 production lines.

On January 7, 2010, the Company and ITN entered into an equipment purchase agreement whereby the Company purchased seven research and development vacuum and deposition chambers for \$1,100,000 from ITN. Payments in the amount of \$350,000 were remitted to ITN in January 2010 and January 2011. A final payment, without interest, in the amount of \$400,000 is due on January 15, 2012.

### **NOTE 17. COMMITMENTS**

**Lease Agreement:** On June 25, 2010, the Company entered into a lease agreement for the FAB1 facility in Littleton, Colorado; the lease was extended March 1, 2011. As of March 31, 2011, future minimum payments totaling \$319,770 are due through June 2012.

The Company is also responsible for payment of pass-through expenses such as property taxes, insurance, water and utilities. Rent expense for the three months ended March 31, 2011 and 2010 was \$72,667 and \$75,401 respectively.

**Patent License Agreements:** In 2006, the Company entered into two non-exclusive patent license agreements, one of which was terminated in 2010. In consideration for the right to license certain inventions, the Company is required to pay annual royalty payments based on net sales of products manufactured using the licensed technology. If there are no net sales of products manufactured using the licensed technology, then a minimum royalty payment is required. The Company has made payments for the annual minimum royalties due associated with these patent license agreements. These payments are insignificant in amount and are recorded under Research and development expense in the Condensed Statements of Operations.

### **NOTE 18. RETIREMENT PLAN**

On July 1, 2006, the Company adopted a qualified 401(k) plan which provides retirement benefits for all of its eligible employees. Under the plan, employees become eligible to participate at the first entry date, provided that they are at least 21 years of age. The participants may elect through salary reduction to contribute up to ceilings established in the Internal Revenue Code. The Company will match 100% of the first six percent of employee contributions. In addition, the Company may make discretionary contributions to the Plan as determined by the Board of Directors. Employees are immediately vested in all salary reduction contributions. Rights to benefits provided by the Company's discretionary and matching contributions vest 100% after the first year of service for all employees hired before January 1, 2010. For employees hired after January 1, 2010, matching contributions vest over a three-year period, one-third per year. Payments for 401(k) matching totaled \$110,229 and \$97,870 for the three months ended March 31, 2011 and 2010, respectively, and are recorded under Research and development expense and Selling, general and administrative expense in the Condensed Statements of Operations.

## Table of Contents

### **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

*The following discussion of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and the notes to those financial statements appearing elsewhere in this Form 10-Q. This discussion and analysis contains statements of a forward-looking nature relating to future events or our future financial performance. As a result of many factors, our actual results may differ materially from those anticipated in these forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.*

#### **Overview**

We are a development stage company formed to commercialize flexible photovoltaic ( PV ) modules using our proprietary technology. For the three months ended March 31, 2011, we generated approximately \$1,184,000 of revenue. Our revenue from government research and development contracts was \$966,000 and our revenue from product sales was \$218,000. As of March 31, 2011, we had an accumulated deficit of approximately \$86.9 million. Currently we are in production utilizing a combination of equipment in our FAB1 and FAB2 production lines on qualified equipment. We are qualifying additional equipment that has been delivered and additional equipment is scheduled for delivery in 2011. Under our current business plan, we expect losses to continue until production reaches an annual rated capacity of approximately 30 MW or more. To date, we have financed our operations primarily through public and private equity financings. On November 16, 2010, we completed a public offering of 5,250,000 shares of common stock. The offering price was \$4.15 per share resulting in total net proceeds of approximately \$20.4 million. The proceeds from the stock sales are being utilized to fund equipment purchases for FAB2 in Thornton, Colorado, as well as the funding of negative operating cash flows as we ramp up production levels.

While focused on speed to market, we believe that quality and consistency of product will be paramount to our success in the marketplace. Consequently, we follow a highly disciplined, staged progression based upon the achievement of key milestones and supported by over sixteen years of concerted research and development activity by our scientists. Our progression also takes into account market conditions, as well as financing options. In keeping with our philosophy, we completed construction of our FAB1 production line in December 2007. In March 2008, we demonstrated initial operating capacity ( IOC ) of the FAB1 production line by initiating production trials as an end-to-end integrated process. Early IOC production trials resulted in average thin-film device efficiencies of 9.5% and small area monolithically integrated module efficiencies of over 7.0%. During 2008 optimization trials resulted in thin-film device efficiencies in the 9.5% to 11.5% range and corresponding module efficiencies in the 7.0% to 9.0% range. The test modules measured approximately 15 centimeters wide by 30 centimeters long.

During 2008 we focused on testing and qualifying our FAB1 production line in anticipation of commencing production. During the first quarter of 2009, we began limited production of monolithically integrated flexible CIGS modules on our FAB1 production line and continued to provide sample modules to potential customers and development partners to explore integration of our products into new applications. In June 2009, we announced the fabrication of a five meter long CIGS module, which we believe is the largest monolithically interconnected CIGS module ever produced on polyimide and possibly the largest CIGS module ever produced regardless of construction. Based on internal test and evaluation, this five meter long module weighed approximately two kilograms and produced 123 watts (under standard test conditions) with an aperture area efficiency of 9.1%.

In July 2009, we obtained independent verification by the U.S. Department of Energy's National Renewable Energy Laboratory ( NREL ) that the modules produced from FAB1 measured 10.4% in conversion efficiency. The modules tested at NREL were approximately 15 centimeters wide by 30 centimeters long and were produced on the Company's FAB1 production line. In October 2009, NREL verified our achievement of a manufacturing milestone of 14.0% cell efficiency from FAB1. We also announced a peak efficiency of 11.7% for CIGS modules manufactured at FAB1. In December 2010, we achieved 12.1% module efficiency on the same form factor.

In August 2009, we completed internal qualification testing of a flexible packaging solution which successfully passed the rigorous standard of one thousand (1,000) hours of damp heat testing (85% relative humidity and 85° C temperature) guideline set forth by International Electrotechnical Commission ( IEC ) 61646 standards for performance and long term reliability of thin-film solar modules. In February 2010, three of our product configurations were certified by an independent laboratory on a variety of United States Department of Defense ( DOD ) rugged standards known as MIL-STD-810G. In October 2010, we completed full external certification under IEC 61646 at an independent laboratory of a two meter module for BAPV applications. Achieving this certification is required for building integrated photovoltaic ( BIPV ) and building applied photovoltaic ( BAPV ) applications used in commercial, industrial and residential rooftop markets. Based on our new focus and direction, certification activities will continue as required as we introduce new products and make changes or improvements to our already certified products.

In June 2010, we announced that the Defense Advanced Research Projects Agency ( DARPA ) selected us for an award under the Low-Cost Lightweight Portable Photovoltaics ( PoP ) solicitation. The Company led program, entitled Flexible High-performance Tandem-junction PV Array , consists of three gated phases that extend over 54 months. The total contract value is approximately \$3.8 million. The goal of PoP is to

demonstrate low-cost, lightweight PV that can stand up to battle conditions and environmental extremes while delivering a power conversion efficiency of 20% or greater by the end of the program.

**Commercialization and Manufacturing Expansion Plan**

We intend to be the first company to commercialize the manufacture of large, roll-format, PV modules that use CIGS on a flexible, plastic substrate. Our manufacturing expansion plan entails the design, installation, qualification, testing and operation of additional production tools to increase our rated production capacity. During the three months ended March 31, 2011, we had product sales of approximately \$218,000 which we do not consider sufficient for exiting development stage.

Approximately 81% of the total equipment planned for delivery into FAB2 had been delivered by March 31, 2011. We exited 2010 at an annual run rate of approximately 2 MW on equipment with a nameplate or nominal capacity of 8 MW per year. Additional equipment deliveries are planned during 2011. In March 2011, based on market conditions we revised our near-term strategy to focus on higher value applications for emerging and specialty markets. In the past, Ascent has dedicated many of its resources to establishing a position in BIPV/BAPV markets. The BIPV/BAPV markets are still important to our long-term growth and success. Our 2011 production volumes will be based primarily on market demand for our products in emerging and specialty markets.

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## **Table of Contents**

During 2010, we applied for funding under the U.S. Department of Energy ( DOE ) Loan Guarantee Program for our planned third production facility ( FAB3 ) with a nameplate capacity of 150 MW per year. The DOE reviewed our Part I submission under the Loan Guarantee Application - Innovative Energy Efficiency, Renewable Energy and Advanced Transmission and Distribution Technologies Solicitation No. DE-FOA-0000140, and deemed it responsive to the initial threshold requirements. We completed our Part II submission under the program in December 2010. On February 23, 2011, the DOE informed us that our submission was selected for due diligence review by the DOE. Timing and funding requirements under the loan guarantee program did not correlate with our revised business plan and consequently, in April 2011, we informed the DOE that we were withdrawing our submission from further consideration under the program.

### **Capital Equipment Expenditures and Manufacturing Costs**

Since our formation in October 2005, the majority of our cash outlays have gone toward the investment in capital equipment necessary to develop our manufacturing capabilities for producing the commercial products we envision and for research and development. We expect this trend to continue into 2012 as we incrementally expand our rated capacity.

We currently expect the capital expenditures for FAB2 to total approximately \$102 million to \$107 million for manufacturing and development equipment. We invested approximately \$19 million for the acquisition and renovation of the FAB2 manufacturing facility in Thornton, Colorado. We also expect capital expenditures of approximately \$6.0 million for installation and qualification of the FAB2 equipment. As of March 31, 2011, we have made actual cash payments of approximately \$87.0 million for the FAB2 equipment including installation costs and deposits on undelivered equipment. During 2011 we expect to make payments of \$6.3 million (included in Restricted Cash) on the FAB2 manufacturing equipment, of which payments in the amount of approximately \$5.6 million have been secured by a letters of credit. The remaining obligation for equipment beyond 2011 is approximately \$6.5 million.

During the first quarter of 2009, we began limited production of monolithically integrated flexible CIGS modules from our FAB1 production line. In mid 2010 we began initial production of monolithically integrated flexible CIGS modules from our FAB2 production plant. We are continuing the process of qualifying the remaining production tools that have been delivered into FAB2. During 2011, we will be focused on ramping up the equipment already in production and qualification of the equipment in house and to be delivered in 2011.

The timing and amount of our production capacity and actual output will depend on customer demand as well as a number of technical factors such as module efficiency, production yield and throughput. Future production in FAB2 will depend on our continuing efforts to successfully ramp up the production equipment.

We are continuing the process of qualifying the remaining production tools that have been delivered into FAB2. We have additional tools on order that have not been delivered into FAB2. The output of FAB2 in 2011 will depend on product demand, market conditions, technical factors, and the timing of the final qualification and delivery of tools into FAB2. We intend to continue to optimize our manufacturing processes including throughput, efficiency and yield to improve product performance and reduce manufacturing costs. We also intend to identify and evaluate suitable locations for new production lines for future expansion, domestically and abroad, that we believe will best serve our target markets and customers for future expansion.

### **Significant Trends, Uncertainties and Challenges**

We believe that the significant trends, uncertainties and challenges that directly or indirectly affect our financial performance and results of operations include:

Our ability to qualify production tools to achieve desired production yields, throughput, module efficiencies and other performance targets, and to obtain in a timely manner necessary or desired certifications for our PV modules;

Our ability to expand production in accordance with our plans set forth above under Commercialization and Manufacturing Expansion Plan ;

Our ability to achieve projected operational performance and cost metrics;



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Our ability to consummate strategic relationships with key partners, including original equipment manufacturers ( OEMs ) customers, system integrators, value added resellers and distributors who deal directly with manufacturers and end-users in the BIPV/BAPV, portable power, EIPV and government/defense solar panel markets;

Consumer and customer acceptance of and demand for our products:

The effect that currency fluctuations may have on our capital equipment purchases, manufacturing costs and the price of our planned PV modules;

Changes in the supply and demand for PV modules as well as fluctuations in selling prices for PV modules worldwide;

## **Table of Contents**

Our ability to raise additional capital on terms favorable to us;

Our ability to manage the planned expansion of our manufacturing facilities, operations and personnel;

Our ability and the ability of our distributors, suppliers and customers to manage operations and orders and timely delivery of production tools; and

Availability of raw materials.

## **Critical Accounting Policies and Estimates**

Critical accounting policies used in reporting our financial results are reviewed by management on a regular basis. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. Processes used to develop these estimates are evaluated on an ongoing basis. Estimates are based on historical experience and various other assumptions that are believed to be reasonable for making judgments about the carrying value of assets and liabilities. Actual results may differ as outcomes from assumptions may change.

Our significant accounting policies were described in Note 3 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2010. There have been no changes to these policies that are of potential significance to us during the three months ended March 31, 2011.

## **Recent Accounting Pronouncements**

See Note 3, Summary of Significant Accounting Policies, in the *Notes to Condensed Financial Statements*.

## **Results of Operations**

### **Comparison of the Three Months Ended March 31, 2011 and 2010**

Our activities to date have substantially consisted of raising capital, business and product development, research and development and the development of our FAB1 and FAB2 production lines.

*Research and Development Revenues.* Our revenues were \$1,183,655 for the three months ended March 31, 2011 compared to \$216,196 for the three months ended March 31, 2010, an increase of \$967,459. Revenues for the three months ended March 31, 2011 includes \$217,883 of product sales, which constitutes a portion of the increase. Revenues earned on our government R&D contracts increased by \$749,576 as a result of two government contracts that were entered into and began generating revenue in June 2010.

*Research and Development.* R&D costs were \$8,595,173 for the three months ended March 31, 2011 compared to \$4,558,319 for the three months ended March 31, 2010, an increase of \$4,036,854. R&D costs include the costs incurred for pre-production and production activities in FAB1 and FAB2 and facility and equipment infrastructure costs. R&D costs also include costs related to our governmental contracts. Costs related to pre-production and production activities increased approximately \$3,587,000. The pre-production and production cost increases were comprised of depreciation and amortization of approximately \$1,443,000, materials and equipment related costs of approximately \$1,024,000, consulting and contract services of approximately \$737,000, facility related costs of approximately \$86,000 and severance costs of approximately \$378,000, offset by reductions in personnel related costs of approximately \$157,000. Governmental R&D expenditures increased by approximately \$450,000. The R&D cost increases were comprised of materials and equipment related costs of approximately \$418,000, personnel related costs of approximately \$53,000 and consulting and contract services of approximately \$10,000, offset by a decrease facility related costs of approximately \$49,000.

*Selling, General and Administrative.* SG&A expenses were \$2,453,868 for the three months ended March 31, 2011 compared to \$2,131,105 for the three months ended March 31, 2010, an increase of \$322,763. This increase is the result of stock compensation expense of approximately \$204,000, which includes acceleration of certain equity awards for our former CEO, Dr. Farhad Moghadam, personnel related costs associated with increased headcount of approximately \$104,000 and severance costs of approximately \$72,000, offset by reductions in public company related costs of approximately \$29,000, equipment related costs of approximately \$21,000 and insurance costs of approximately \$20,000.

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*Interest Expense.* Interest costs of \$117,701 and \$121,309 were incurred and capitalized as property, plant and equipment for the three months ended March 31, 2011 and March 31, 2010, respectively. Interest incurred relates to our CHFA loan utilized for our FAB2 production facility expansion in Thornton, Colorado.

*Interest Income.* Interest income was \$15,603 for the three months ended March 31, 2011 compared to \$12,110 for the three months ended March 31, 2010, an increase of \$3,493. Interest income represents interest on cash and short-term investments. Despite lower average cash balance, interest income increased due to slight improvements in interest rates in 2011 as compared to 2010.

**Table of Contents**

*Realized Gain (Loss) on Forward Contracts and Foreign Currency Investments.* Realized gain (loss) on forward contracts and foreign currency investments includes gains and losses incurred when forward contracts mature and adjustments calculated on cash held in foreign currencies to reflect the current exchange rate. For the three months ended March 31, 2011 the realized gain on forward contracts and foreign currency investments was \$194,761 compared to a realized loss of \$142,630 for the three months ended March 31, 2010, an increase of \$337,391. The increase is the result of favorable changes in the exchange rate related to our foreign currency investments.

*Net Loss.* Our Net Loss was \$9,654,589 for the three months ended March 31, 2011 compared to a Net Loss of \$6,603,748 for the three months ended March 31, 2010, an increase in Net Loss of \$3,050,841. The increase in Net Loss can be summarized in variances in significant account activity as follows:

	(Increase) decrease to Net Loss For the Three Months Ended March 31, 2011 Compared to the Three Months Ended March 31, 2010
Research and development revenues	\$ 967,459
Research and development costs	
Manufacturing R&D	(483,462)
Government R&D	(3,467,758)
Non-cash stock based compensation	(85,634)
Selling, general and administrative expenses	
Corporate S, G&A	(116,450)
Non-cash stock based compensation	(206,313)
Interest income	3,493
Realized gain (loss) on investments	433
Realized gain (loss) on forward contracts and foreign currency investments	337,391
Increase to Net Loss	\$ (3,050,841)

**Liquidity and Capital Resources**

As of March 31, 2011, we had approximately \$30.8 million in cash and investments. We also had \$6.4 million in restricted cash securing equipment purchases which is included in Other Assets on the Balance Sheet. On November 16, 2010, we completed a public offering of 5,250,000 shares of common stock, yielding total net proceeds of approximately \$20.4 million. We currently expect the cost of FAB2 will total approximately \$102 million to \$107 million for manufacturing and development equipment. We invested approximately \$19 million for the acquisition of the building and renovation the FAB2 manufacturing facility in Thornton, Colorado. We also expect capital expenditures of approximately \$6.0 million for installation and qualification of the FAB2 equipment. As of March 31, 2011, we have made actual cash payments of approximately \$87.0 million for the FAB2 equipment including installation costs and deposits on undelivered equipment. We expect to make payments on equipment for the FAB2 production line of approximately \$6.3 million during the remaining three quarters of 2011 for property, plant and equipment. The remaining obligation for equipment beyond 2011 is approximately \$6.5 million.

On March 31, 2011, we announced a change in strategy that will focus our solar module technology on applications for emerging and specialty markets. The change in strategy resulted in a change in leadership and sizing the company to a new cost structure, primarily through the termination of a portion of the Company's workforce. We incurred a charge of approximately \$450,000 in the quarter ended March 31, 2011, comprised of severance costs. This charge has been recorded under Accrued expenses in the Condensed Balance Sheets and expensed as Research and development and Selling, general and administrative in the Condensed Statement of Operations in the amounts of approximately \$72,000 and \$378,000, respectively. We expect to make payments of approximately \$185,000 during the quarter ended June 30, 2011, and the remaining estimated amount of \$265,000 over the following ten months. The actions taken are expected to reduce monthly operating costs to approximately \$1.6 million per month.

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During the three months ended March 31, 2011, the use of cash for operational expenses averaged approximately \$2.5 million per month and was related to manufacturing and engineering activities, research and development, business development and general corporate expenses. As of April 15, 2011, we had 77 full-time employees and 8 contractors provided through an employment services provider.

*Operating Activities.* For the three months ended March 31, 2011, our cash used in operations was \$7,539,174 compared to \$5,782,589 for the three months ended March 31, 2010, an increase of \$1,756,585. The increase in cash used in operations is primarily the result of qualifying our equipment, ramping up production and purchases of inventory. The increase is comprised of an increase in Net Loss of approximately \$3,051,000 and inventory purchases of approximately \$1,542,000, offset by an increase in depreciation and amortization of approximately \$1,334,000 and a decrease in accrued expenses of approximately \$919,000.

*Investing Activities.* Cash used in investing activities totaled \$3,171,969 for the three months ended March 31, 2011 compared to cash provided by investing activities of \$14,428,226 for the three months ended March 31, 2010, a net change of \$17,600,195. The net change in investing activities is the result of a net decrease in sales and maturities of investments of approximately \$14,607,000. Also contributing to the net change was approximately \$3,097,000 transferred to Restricted Cash to facilitate future equipment payments.

*Financing Activities.* Cash used in financing activities totaled \$405,998 for the three months ended March 31, 2011 compared to \$7,265 for the three months ended March 31, 2010, an increase of \$398,733. The increase in cash used in financing activities is the result of a decrease of approximately \$390,000 in proceeds received from issuance of stock.

**Table of Contents**

We expect our current cash balance to be sufficient to cover our planned capital and operational expenditures for at least the next 12 months based on currently known factors and limited projected revenues. We expect that we may need to raise additional capital to cover our operating losses and future manufacturing capacity expansion. There is no assurance that we will be able to raise additional capital on acceptable terms or at all.

On January 9, 2009, we filed a shelf Registration Statement on Form S-3 with the SEC. The SEC declared the registration statement effective on January 16, 2009. The shelf registration was utilized in connection with our public offering of approximately 4.6 million shares that closed on October 6, 2009 with gross proceeds of approximately \$30 million. With the shelf registration, we may from time to time sell common stock, preferred stock, warrants or some combination in one or more offerings for up to \$120 million, the remaining amount available.

On November 11, 2010, we entered into an underwriting agreement with Cowen and Company, LLC, Rodman & Renshaw LLC and ThinkEquity LLC providing for the sale in a firm commitment offering of 5,250,000 shares of the Company's common stock at a price to the public of \$4.15 per share. The offer and sale of the shares were registered under the Company's shelf registration statement. The offering closed on November 16, 2010 with net proceeds to the Company of approximately \$20.4 million.

On February 28, 2011, we entered into an At-The-Market Equity Offering Sales Agreement pursuant to which we may issue and sell through an agent up to \$25,000,000 of our common stock from time to time at prevailing market prices on the NASDAQ stock exchange. As of March 31, 2011, no shares had been sold under this facility.

**Contractual Obligations**

The following table presents our contractual obligations as of March 31, 2011. Our long-term obligation is related to our building loan reflecting both principal and interest. Our purchase obligations include orders for equipment, inventory and operating expenses.

	Total	Payments Due by Year (in thousands)			
		Less Than			More Than
		1	1-3 Years	3-5 Years	5
Contractual Obligations		Year			Years
Long-term debt obligations	\$ 11,676	\$ 694	\$ 2,081	\$ 2,081	\$ 6,820
Operating lease obligations	433	349	84		
Purchase obligations	2,959	2,959			
Total	\$ 15,068	\$ 4,002	\$ 2,165	\$ 2,081	\$ 6,820

**Off Balance Sheet Transactions**

As of March 31, 2011, we did not have any off balance sheet arrangements as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

**Item 3. Quantitative and Qualitative Disclosures About Market Risk**  
**Foreign Currency Exchange Risk**

We are actively engaged in purchasing manufacturing equipment internationally and are exposed to foreign currency risk.

In July 2008 and March 2009 we entered into fair value hedges utilizing forward contracts designed to match scheduled contractual payments to equipment suppliers which are denominated in Euros and Yen. The total notional value of the Euro forward contracts was 6.4 million with various contract settlement dates beginning September 15, 2008 through July 31, 2009. The total notional value of the Yen forward contracts was ¥521.4 million with contract settlement dates of March and April 2009. Those forward contracts had been settled as of December 31, 2009 and the currencies contracted for were delivered to us, however, not all payments have been made to our equipment suppliers and we continue to have foreign currency risk. Included in restricted cash is approximately \$3.1 million in Euros held as of March 31, 2011 in our bank account for future payments to our equipment suppliers. Based on our overall currency rate exposure as of March 31, 2011, a near-term 10% appreciation or depreciation in the United States Dollar, relative to our foreign currencies on deposit, would have a positive or negative impact of approximately

\$0.3 million on our results of operations.

## **Table of Contents**

Although our reporting currency is the U.S. dollar, we may conduct business and incur costs in the local currencies of other countries in which we may operate, make sales and buy materials. As a result, we are subject to currency translation risk. Further, changes in exchange rates between foreign currencies and the U.S. dollar could affect our future net sales and cost of sales and could result in exchange losses.

Our objective is to fix the dollar amount of our foreign currency denominated manufacturing equipment purchases at time of order. Although the hedging activity described below is designed to fix the dollar amount to be expended, the asset purchased is recorded at the spot foreign currency rate in effect as of the date of the payment to the supplier. The difference between the spot rate and the forward rate has been reported as a gain or loss on forward contract.

We currently have unhedged open purchase orders to equipment suppliers denominated in Yen for approximately ¥387.9 million. A 10% appreciation or depreciation in the United States Dollar, relative to this purchase obligation, would have a positive or negative impact range of approximately \$0.4 million to \$0.5 million on our future cash flows. As of March 31, 2011, we held two forward currency options hedging approximately \$1.7 million in equipment payments to be remitted in Yen. We cannot accurately predict future exchange rates or the overall impact of future exchange rate fluctuations on our business, results of operations and financial condition.

### **Interest Rate Risk**

Our exposure to market risks for changes in interest rates relates primarily to our cash equivalents and investment portfolio. As of March 31, 2011, our cash equivalents consisted of money market funds, investments in U.S. government securities and high quality corporate securities. The primary objective of our investment activities is to preserve principal and provide liquidity on demand, while at the same time maximizing the income we receive from our investments without significantly increasing risk. The direct risk to us associated with fluctuating interest rates is limited to our investment portfolio and we do not believe that a change in interest rates will have a significant impact on our financial position, results of operations or cash flows.

### **Credit Risk**

We have certain financial and derivative instruments that potentially subject us to credit risk. These consist primarily of cash, cash equivalents, restricted cash, investments and foreign currency option contracts. We are exposed to credit losses in the event of nonperformance by the counter parties to our financial and derivative instruments. We place cash, cash equivalents, investments and forward foreign currency option contracts with various high-quality financial institutions, and exposure is limited at any one institution. We continuously evaluate the credit standing of our counter party financial institutions.

## **Item 4. Controls and Procedures**

### **Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended (the Exchange Act) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission (SEC) rules and forms. Our management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation required by Rules 13a-15 and 15d-15 under the Exchange Act of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15 and 15d-15 under the Exchange Act as of March 31, 2011. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of March 31, 2011, our disclosure controls and procedures were effective.

### **Changes in Internal Control over Disclosure and Reporting**

There was no change in our internal control over financial reporting that occurred during the quarterly period ended March 31, 2011 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.



**Table of Contents**

**PART II. OTHER INFORMATION**

**Item 1A. Risk Factors**

In addition to the other information set forth in this report, you should carefully consider the factors discussed in the updated risk factors in our Annual Report on Form 10-K filed on February 28, 2011, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K filed on February 28, 2011 are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or future results.

**Item 6. Exhibits**

a. A list of exhibits is found on page 26 of this report.

**Table of Contents**

**ASCENT SOLAR TECHNOLOGIES, INC.**

**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 on the 28th day of April, 2011.

ASCENT SOLAR TECHNOLOGIES, INC.

By: */s/* GARY GATCHELL  
Gary Gatchell

**Chief Financial Officer**

**(Principal Financial Officer and Authorized Signatory)**

**Table of Contents**

ASCENT SOLAR TECHNOLOGIES, INC.

EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
10.1	Executive Employment Agreement with Ron Eller (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed April 6, 2011)
10.2	At-the-Market Equity Offering Sales Agreement between the Company and Stifel, Nicolaus & Company, Incorporated dated February 28, 2011 (incorporated by reference to Exhibit 10.39 to our Annual Report on Form 10-K filed February 28, 2011)
31.1	Chief Executive Officer Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Chief Financial Officer Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Chief Executive Officer Certification pursuant to section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Chief Financial Officer Certification pursuant to section 906 of the Sarbanes-Oxley Act of 2002*

\* Filed herewith