

Ascent Solar Technologies, Inc.
Form 10-Q
May 10, 2012
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, 2012

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)

| | |
|---|---|
| Delaware | 20-3672603 |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |

| | |
|--|------------|
| 12300 Grant Street, Thornton, CO | 80241 |
| (Address of principal executive offices) | (Zip Code) |

Registrant's telephone number including area code: 720-872-5000

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 Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

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

As of April 30, 2012, there were 41,154,516 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, 2012
 Table of Contents

PART I. FINANCIAL INFORMATION

| | | |
|---------|--|-----------|
| Item 1. | <u>Condensed Financial Statements (unaudited)</u> | <u>3</u> |
| | <u>Condensed Balance Sheets—As of March 31, 2012 and December 31, 2011</u> | <u>3</u> |
| | <u>Condensed Statements of Operations and Comprehensive Income (Loss)—For the three months ended March 31, 2012 and March 31, 2011 and for the period from inception (October 18, 2005) through March 31, 2012</u> | <u>4</u> |
| | <u>Condensed Statements of Cash Flows—For the three months ended March 31, 2012 and March 31, 2011 and for the period from inception (October 18, 2005) through March 31, 2012</u> | <u>5</u> |
| | <u>Notes to Condensed Financial Statements</u> | <u>6</u> |
| Item 2. | <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u> | <u>12</u> |
| Item 3. | <u>Quantitative and Qualitative Disclosures About Market Risk</u> | <u>17</u> |
| Item 4. | <u>Controls and Procedures</u> | <u>18</u> |

PART II. OTHER INFORMATION

| | | |
|----------|--|-----------|
| Item 1. | <u>Legal Proceedings</u> | <u>18</u> |
| Item 1A. | <u>Risk Factors</u> | <u>19</u> |
| Item 2. | <u>Unregistered Sales of Equity Securities and Use of Proceeds</u> | <u>19</u> |
| Item 3. | <u>Defaults Upon Senior Securities</u> | <u>19</u> |
| Item 4. | <u>Mine Safety Disclosures</u> | <u>19</u> |
| Item 5. | <u>Other Information</u> | <u>19</u> |
| Item 6. | <u>Exhibits</u> | <u>19</u> |
| | <u>SIGNATURES</u> | <u>20</u> |
| | <u>EXHIBIT INDEX</u> | <u>21</u> |

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Condensed Financial Statements

ASCENT SOLAR TECHNOLOGIES, INC.
(A Development Stage Company)
CONDENSED BALANCE SHEETS
(Unaudited)

| | March 31, 2012 | December 31, 2011 |
|--|-------------------|----------------------|
| ASSETS | | |
| Current Assets: | | |
| Cash and cash equivalents | \$12,553,811 | \$11,298,885 |
| Investments | 6,368,836 | 12,616,097 |
| Trade receivables, net of allowance for doubtful accounts of \$5,839 | 348,724 | 342,087 |
| Inventories | 2,321,028 | 2,469,123 |
| Prepaid expenses and other current assets | 701,911 | 386,624 |
| Total current assets | 22,294,310 | 27,112,816 |
| Property, Plant and Equipment: | 39,661,325 | 36,897,531 |
| Less accumulated depreciation and amortization | (9,403,239) | (7,964,875) |
| | 30,258,086 | 28,932,656 |
| Other Assets: | | |
| Restricted cash | 468,367 | 1,427,053 |
| Deposits on manufacturing equipment | 2,496,139 | 3,582,883 |
| Patents, net of amortization of \$32,957 and \$28,248, respectively | 329,756 | 308,785 |
| Other non-current assets | 59,375 | 60,312 |
| | 3,353,637 | 5,379,033 |
| Total Assets | \$55,906,033 | \$61,424,505 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current Liabilities: | | |
| Accounts payable | \$566,042 | \$658,834 |
| Accrued expenses | 1,804,899 | 1,846,997 |
| Accrued property, plant and equipment | 617,777 | 1,626,317 |
| Deferred revenue | 12,190 | — |
| Current portion of long-term debt | 252,174 | 648,059 |
| Total current liabilities | 3,253,082 | 4,780,207 |
| Long-Term Debt | 6,550,462 | 6,615,070 |
| Accrued Warranty Liability | 26,660 | 26,660 |
| Commitments and Contingencies (Notes 4 & 13) | | |
| Stockholders' Equity: | | |
| Preferred stock, \$0.0001 par value, 25,000,000 shares authorized, no shares outstanding | — | — |
| Common stock, \$0.0001 par value, 125,000,000 shares authorized; 41,154,516 and 39,345,459 shares issued and outstanding, respectively | 4,115 | 3,935 |
| Additional paid in capital | 234,589,103 | 233,004,550 |
| Deficit accumulated during the development stage | (188,517,442) | (183,006,936) |
| Accumulated other comprehensive income (loss) | 53 | 1,019 |
| Total stockholders' equity | 46,075,829 | 50,002,568 |

Edgar Filing: Ascent Solar Technologies, Inc. - Form 10-Q

| | | |
|--|--------------|--------------|
| Total Liabilities and Stockholders' Equity | \$55,906,033 | \$61,424,505 |
|--|--------------|--------------|

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

3

Table of Contents

ASCENT SOLAR TECHNOLOGIES, INC.

(A Development Stage Company)

CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

(Unaudited)

| | For the Three Months Ended March 31, | | For the Period from Inception (October 18, 2005) Through March 31, 2012 |
|--|---|----------------|---|
| | 2012 | 2011 | |
| Revenues | \$441,566 | \$1,183,655 | \$10,839,715 |
| Costs and Expenses | | | |
| Research and development | 4,390,325 | 8,595,173 | 84,076,008 |
| Selling, general and administrative | 1,494,111 | 2,453,868 | 37,316,141 |
| Impairment loss | — | — | 79,769,480 |
| Total Costs and Expenses | 5,884,436 | 11,049,041 | 201,161,629 |
| Loss from Operations | (5,442,870) | (9,865,386) | (190,321,914) |
| Other Income/(Expense) | | | |
| Interest expense | (67,516) | — | (1,268,279) |
| Interest income | 5,245 | 15,603 | 4,476,386 |
| Contract cancellation loss | — | — | (590,774) |
| Realized gain on investments | — | 433 | 27,472 |
| Realized loss on forward contracts | — | — | (1,430,766) |
| Foreign currency transaction gain (loss) | (5,365) | 194,761 | 590,433 |
| | (67,636) | 210,797 | 1,804,472 |
| Net Loss | (5,510,506) | (9,654,589) | (188,517,442) |
| Other Comprehensive Income (Loss) | | | |
| Unrealized gain (loss) on investments | (966) | 3,845 | 53 |
| Comprehensive Loss | \$(5,511,472) | \$(9,650,744) | \$(188,517,389) |
| Net Loss Per Share (Basic and diluted) | \$(0.14) | \$(0.30) | |
| Weighted Average Common Shares Outstanding (Basic and diluted) | 40,547,280 | 32,306,837 | |

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 | | For the Period |
|---|----------------------------|-----------------|--------------------|
| | March 31, | | from Inception |
| | 2012 | 2011 | (October 18, 2005) |
| | | | through |
| | | | March 31, |
| | | | 2012 |
| Operating Activities: | | | |
| Net loss | \$ (5,510,506) | \$ (9,654,589) | \$ (188,517,442) |
| Adjustments to reconcile net loss to cash used in operating activities: | | | |
| Depreciation and amortization | 1,444,011 | 2,328,369 | 19,791,035 |
| Stock based compensation | 350,342 | 811,974 | 12,237,719 |
| Common stock issued for services | — | — | 58,950 |
| Realized loss on forward contracts | — | — | 1,430,766 |
| Foreign currency transaction loss (gain) | 5,365 | (194,761) | (590,433) |
| Amortization of financing costs and discounts | — | — | 998,565 |
| Impairment loss | — | — | 79,769,480 |
| Contract cancellation loss | — | — | 590,774 |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable | (6,637) | (408,247) | (348,724) |
| Inventories | 148,095 | (1,542,096) | (2,321,028) |
| Prepaid expenses and other current assets | (315,287) | 46,597 | (701,911) |
| Accounts payable | (92,792) | 654,745 | 566,042 |
| Accrued expenses | (42,098) | 548,127 | 1,077,406 |
| Deferred revenue | 12,190 | (133,543) | 12,190 |
| Warranty reserve | — | 4,250 | 26,660 |
| Net cash used in operating activities | (4,007,317) | (7,539,174) | (75,919,951) |
| Investing Activities: | | | |
| Purchases of available-for-sale securities | (638,572) | (13,848,658) | (907,118,827) |
| Maturities and sales of available-for-sale securities | 6,884,867 | 16,771,924 | 900,750,045 |
| Purchase of property, plant and equipment | (2,690,956) | (2,986,116) | (131,245,752) |
| Restricted cash for manufacturing equipment | 958,686 | (3,097,033) | (468,367) |
| Patent activity costs | (25,680) | (12,086) | (337,756) |
| Net cash provided by (used in) investing activities | 4,488,345 | (3,171,969) | (138,420,657) |
| Financing Activities: | | | |
| 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) | (10,302,040) |
| Proceeds from debt | — | — | 7,700,000 |
| Repayment of debt | (460,493) | (406,639) | (1,997,364) |
| Proceeds from shareholder under Section 16(b) | — | — | 148,109 |
| Proceeds from issuance of stock and warrants | 1,234,391 | 5,500 | 231,667,407 |
| Redemption of Class A warrants | — | — | (48,128) |
| Net cash provided by (used in) financing activities | 773,898 | (405,998) | 226,894,419 |

Edgar Filing: Ascent Solar Technologies, Inc. - Form 10-Q

| | | | |
|--|--------------|---------------|---------------|
| Net change in cash and cash equivalents | 1,254,926 | (11,117,141) | 12,553,811 |
| Cash and cash equivalents at beginning of period | 11,298,885 | 27,303,217 | — |
| Cash and cash equivalents at end of period | \$12,553,811 | \$16,186,076 | \$ 12,553,811 |
| Supplemental Cash Flow Information: | | | |
| Cash paid for interest | \$66,579 | \$— | \$ 180,474 |
| Cash paid for income taxes | \$— | \$— | \$ — |
| Non-Cash Transactions: | | | |
| ITN initial contribution of assets for equity | \$— | \$— | \$ 31,200 |
| Note with ITN and related capital expenditures | \$— | \$— | \$ 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.

NOTE 2. BASIS OF PRESENTATION

The Company’s activities to date have consisted substantially of raising capital, research and development, and establishment of its production plant. Revenues to date have been primarily generated from the Company’s governmental research and development 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 provided additional disclosure of inception to date activity in the Condensed Statements of Operations 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, 2011 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, 2011. 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, 2011.

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 the 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, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012.

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, 2011. 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, 2012 that are of significance or potential significance to the Company.

Recent Accounting Pronouncements: In June 2011, the FASB issued Accounting Standards Update ("ASU") 2011-05, Comprehensive Income (Topic 220): Presentation of Other Comprehensive Income. This ASU seeks to improve comparability, consistency and transparency of financial reporting with respect to comprehensive income by eliminating the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity, among other amendments. The amendments of this ASU require all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or two separate but consecutive statements. This ASU is effective for

Table of Contents

fiscal years and interim periods beginning after December 15, 2011 and early adoption is permitted. ASU 2011-05 was adopted by the Company for the quarter ended March 31, 2012 and affected only financial statement presentation with no impact to the Company's financial position, results of operations or cash flows.

NOTE 4. LIQUIDITY AND CONTINUED OPERATIONS

As of March 31, 2012, the Company had \$18.9 million in cash and investments and working capital of \$19.0 million. An additional \$0.5 million in cash is restricted for future payments on equipment. During the quarter ended March 31, 2012, the Company sold 1.6 million shares of common stock under its At-The-Market facility for aggregate proceeds of \$1.2 million. As discussed in Note 2, the Company is in the development stage and is currently incurring significant losses from operations as it works toward commercialization. The Company made cash payments of \$2.7 million in the three months ended March 31, 2012 for property, plant and equipment. The Company has remaining obligations for equipment purchases in the approximate amount of \$2.1 million, of which \$0.6 million is recorded in "Accrued property, plant and equipment".

The Company has commenced limited production at its manufacturing facility. The Company does not expect that sales revenue and cash flows will be sufficient to support operations and cash requirements until actual full production capacity is achieved. 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 expects the current cash balance to be sufficient to cover planned capital and operational expenditures through December 31, 2012 based on currently known factors and limited projected revenues. The Company will need to raise additional capital in the future. There is no assurance that the Company will be able to raise additional capital on acceptable terms or at all.

On April 11, 2012, the Company received notice from The NASDAQ Stock Market ("Nasdaq") stating that because the Company had not regained compliance with the \$1.00 minimum bid price requirement for continued listing, the Company's common stock (listed on The Nasdaq Global Market) would be subject to delisting unless the Company requests a hearing before a Nasdaq Hearings Panel (the "Panel"). A hearing will stay any delisting action in connection with the notice and allow the continued listing of the Company's common stock on The Nasdaq Global Market until the Panel renders a decision subsequent to the hearing. The Company requested a hearing before the Panel, which was granted and will occur in May 2012, at which time the Company intends to present a plan to regain compliance with the Rule and request that the Panel allow the Company additional time within which to regain compliance. While the Company believes that it will be able to present a viable plan to regain compliance, there can be no assurance that the Panel will grant the Company's request for continued listing on The Nasdaq Global Market, or that the Company's plans to exercise diligent efforts to maintain the listing of its common stock on the Nasdaq Global Market will be successful.

NOTE 5. RESTRICTED CASH

From time to time the Company establishes irrevocable letters of credit with its bank, collateralized by interest bearing accounts, in favor of equipment vendors. Approximately \$0.5 million and \$1.4 million was restricted under letters of credit as of March 31, 2012 and December 31, 2011, respectively. Amounts restricted under letters of credit are classified 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.

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, 2012:

7

Table of Contents

| | Level 1 | Level 2 | Level 3 | Total | Cash Equivalents | Investments |
|----------------------------|-----------|-------------|---------|-------------|---------------------|--------------|
| Financial Assets: | | | | | | |
| U.S. government securities | \$— | \$1,296,799 | \$— | \$1,296,799 | \$— | —\$1,296,799 |
| Municipal bonds | — | 2,752,263 | — | 2,752,263 | — | 2,752,263 |
| Money market funds | 496,990 | — | — | 496,990 | 496,990 | — |
| Corporate securities | — | 2,319,774 | — | 2,319,774 | — | 2,319,774 |
| | \$496,990 | \$6,368,836 | \$— | \$6,865,826 | \$496,990 | \$6,368,836 |

As of the balance sheet date, the Company held securities issued by U.S. government agencies (AA+/Aaa/AAA ratings), municipalities (AA/Aa2/Aa3/AA- ratings) and A-1/A-1+ rated corporate notes. Approximately \$6.4 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.

In addition to the items measured at fair value on a recurring basis, the Company also measured certain assets at fair value on a nonrecurring basis. The Company recorded an impairment loss of \$78.0 million to write down its long-lived assets to fair value at June 30, 2011. This write-down resulted in net assets of approximately \$32.2 million being recorded at fair value as of June 30, 2011. These fair value measurements rely primarily on Company-specific inputs and the Company's assumptions about the use of the assets, as observable inputs are not available. Accordingly, the Company determined that these fair value measurements reside primarily within Level 3 of the fair value hierarchy.

NOTE 7. INVESTMENTS

Securities held by the Company as of March 31, 2012 are classified as available-for-sale and consisted of U.S. government securities, municipal bonds 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, 2012 is as follows:

| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
|----------------------------|-------------------|---------------------------|----------------------------|----------------------|
| U.S. government securities | \$1,296,648 | \$ 151 | \$ — | \$ 1,296,799 |
| Municipal bonds | 2,752,405 | 91 | (233) | 2,752,263 |
| Corporate securities | 2,319,730 | 44 | — | 2,319,774 |
| Total | \$6,368,783 | \$ 286 | \$ (233) | \$ 6,368,836 |

Contractual maturities of available-for-sale investments as of March 31, 2012 were all one year or less.

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, 2012 have been in a loss position for less than twelve months.

NOTE 8. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment as of March 31, 2012 and December 31, 2011:

Table of Contents

| | As of March 31, 2012 | As of December 31, 2011 |
|--|-------------------------|----------------------------|
| Building | \$5,797,039 | \$ 5,762,935 |
| Furniture, fixtures, computer hardware and computer software | 339,820 | 339,820 |
| Manufacturing machinery and equipment | 32,327,940 | 29,673,297 |
| Leasehold improvements | 884,709 | 884,709 |
| Net depreciable property, plant and equipment | 39,349,508 | 36,660,761 |
| Manufacturing machinery and equipment in progress | 311,817 | 236,770 |
| Property, plant and equipment | 39,661,325 | 36,897,531 |
| Less: Accumulated depreciation and amortization | (9,403,239) | (7,964,875) |
| Net property, plant and equipment | \$30,258,086 | \$ 28,932,656 |

During the quarter ended June 30, 2011, an impairment charge in the amount of approximately \$74.5 million was taken against Property, Plant and Equipment. This impairment, combined with a charge of approximately \$3.5 million taken against Deposits on manufacturing equipment, resulted in a total write-down of \$78.0 million in the quarter ended June 30, 2011.

Depreciation and amortization expense for the three months ended March 31, 2012 and 2011 was \$1,441,262 and \$2,325,314, 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 manufacturing facility building loan as follows during the three months ended March 31, 2012 and 2011:

| | As of March 31, 2012 | As of March 31, 2011 |
|---------------------------|-------------------------|-------------------------|
| Interest cost incurred | \$113,847 | \$117,701 |
| Interest cost capitalized | (46,331) | (117,701) |
| Interest expense, net | \$67,516 | \$— |

NOTE 9. INVENTORIES

Inventories consisted of the following at March 31, 2012 and December 31, 2011:

| | As of March 31, 2012 | As of December 31, 2011 |
|-----------------|-------------------------|----------------------------|
| Raw materials | \$2,173,896 | \$ 2,411,403 |
| Work in process | 113,516 | 20,812 |
| Finished goods | 33,616 | 36,908 |
| Total | \$2,321,028 | \$ 2,469,123 |

NOTE 10. DEBT

On February 8, 2008, the Company acquired a 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 Construction Loan terms required payments of interest at 6.6% on the outstanding balance. In 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 through its term to January 2028. The Company will incur a prepayment penalty if the Permanent Loan is prepaid prior to December 31, 2015. Further, pursuant to certain negative covenants in the Permanent Loan, 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.

Table of Contents

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 was remitted in January 2012.

As of March 31, 2012, future principal payments on long-term debt are due as follows:

| | |
|------------|-------------|
| 2012 | \$187,566 |
| 2013 | 264,935 |
| 2014 | 282,960 |
| 2015 | 302,210 |
| 2016 | 322,771 |
| Thereafter | 5,442,194 |
| | \$6,802,636 |

NOTE 11. STOCKHOLDERS' EQUITY

At March 31, 2012, the Company's authorized capital stock consists of 125,000,000 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.

In January 2012, the Company announced that TFG Radiant had agreed to purchase 8,067,390 shares of the Company's common stock owned by Norsk Hydro for \$4 million, or approximately \$0.50 per share. The TFG Radiant purchase closed on March 30, 2012, at which time TFG Radiant's ownership increased to approximately 39% of the Company's outstanding Common Stock.

In January 2012, the Company entered into an At-The-Market Equity Offering Sales Agreement under which the Company may issue and sell up to \$5,000,000 of shares of its common stock from time to time. 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 stock exchange 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 the sales agent shall be equal to 3% of the gross sales price of the shares sold. As of March 31, 2012, 1,594,395 shares had been sold under this facility with net proceeds of \$1,234,391.

As of March 31, 2012, the Company had 41,154,516 shares of common stock and no shares of preferred stock outstanding. The Company has not declared or paid any dividends through March 31, 2012.

NOTE 12. EQUITY PLANS AND SHARE-BASED COMPENSATION

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, 2012 and 2011 was as follows:

| | For the three months ended March 31, | |
|--|--------------------------------------|------------|
| | 2012 | 2011 |
| Share-based compensation cost included in: | | |
| Research and development | \$ 102,165 | \$ 186,091 |
| Selling, general and administrative | 248,177 | 625,883 |

Edgar Filing: Ascent Solar Technologies, Inc. - Form 10-Q

| | | |
|-------------------------------------|-----------|-----------|
| Total share-based compensation cost | \$350,342 | \$811,974 |
|-------------------------------------|-----------|-----------|

The following table presents share-based compensation expense by type of award for the three months ended March 31, 2012 and 2011:

10

Table of Contents

| | For the three months ended March 31, | |
|-------------------------------------|--------------------------------------|------------|
| | 2012 | 2011 |
| Type of Award: | | |
| Stock Options | \$ 190,279 | \$ 537,793 |
| Restricted Stock Units and Awards | 160,063 | 274,181 |
| Total share-based compensation cost | \$ 350,342 | \$ 811,974 |

Stock Options: The Company recognized share-based compensation expense for stock options of approximately \$190,000 to officers, directors and employees for the three months ended March 31, 2012 related to stock option awards ultimately expected to vest and reduced for estimated forfeitures. The weighted average estimated fair value of employee stock options granted for the three months ended March 31, 2012 and 2011 was \$0.56 and \$2.56 per share, respectively. Fair value was calculated using the Black-Scholes Model with the following assumptions:

| | For the three months ended March 31, | | |
|--------------------------|--------------------------------------|------|---|
| | 2012 | 2011 | |
| Expected volatility | 103 | % 98 | % |
| Risk free interest rate | 1 | % 3 | % |
| Expected dividends | — | — | |
| Expected life (in years) | 5.2 | 6.3 | |

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, 2012, total compensation cost related to non-vested stock options not yet recognized was approximately \$705,000 which is expected to be recognized over a weighted average period of approximately 2.9 years. As of March 31, 2012, approximately 1,112,000 shares were vested or expected to vest in the future at a weighted average exercise price of \$2.74. As of March 31, 2012, approximately 1,736,000 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 \$160,000 for the three months ended March 31, 2012. The weighted average estimated fair value of restricted stock grants for the three months ended March 31, 2012 and 2011 was \$0.56 and \$3.21, respectively.

Total unrecognized share-based compensation expense from unvested restricted stock as of March 31, 2012 was approximately \$391,000 which is expected to be recognized over a weighted average period of approximately 0.8 years. As of March 31, 2012, approximately 530,000 shares were expected to vest in the future. As of March 31, 2012, approximately 160,000 shares remained available for future grants under the Restricted Stock Plan.

NOTE 13. COMMITMENTS AND CONTINGENCIES

On October 21, 2011, the Company was notified that a complaint claiming \$3,048,701 for an investment banking fee (the "Lawsuit") was filed by Jefferies & Company, Inc. ("Jefferies") against the Company in New York State Supreme Court in the County of New York. In December 2010, Ascent and Jefferies entered into an engagement agreement (the "Fee Agreement") pursuant to which Jefferies was hired to act as the Company's financial advisor in relation to certain potential transactions.

Ascent has paid Jefferies the fees it believes are owed under the Fee Agreement, which are a \$100,000 retainer and approximately \$49,000 of out-of-pocket expenses. Ascent believes that the Lawsuit is without merit. The Company

intends to vigorously defend the Lawsuit.

This proceeding is subject to the uncertainties inherent in any litigation. It is subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for an extended period of time. The Company records a liability in its financial statements for costs related to claims, including settlements and judgments, where the Company has assessed that a loss is probable and an amount can be reasonably estimated. It is not possible to predict the outcome for this legal proceeding. If the Lawsuit is determined adversely to the Company, the costs associated with this

Table of Contents

proceeding could have a material adverse effect on the Company's results of operations, financial position and/or cash flows of a future period.

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 in October 2005 to commercialize flexible photovoltaic ("PV") modules using our proprietary technology. For the three months ended March 31, 2012, we generated approximately \$442,000 of revenue. Our revenue from government research and development contracts was approximately \$432,000 and our revenue from product sales was approximately \$10,000. As of March 31, 2012, we had an accumulated deficit of approximately \$188.5 million.

Currently we are in limited production based on our ability to create demand within emerging and specialty markets. We continue to qualify our equipment and we have adjusted our utilization of equipment based on our near term forecast. In the near term we intend to focus on emerging and specialty markets with higher average selling prices, and plan to re-enter the market for large scale rooftop applications in the second half of 2012. Under our current business plan, we expect losses to continue until actual full production capacity is achieved. We intend to augment our own manufacturing capabilities by licensing our proprietary manufacturing processes to others. Although we plan to continue manufacturing at our current facilities, our plans are also to have significant future production capacity enabled through partnerships, joint ventures or other commercial or licensing arrangements. To date, we have financed our operations primarily through public and private equity financings.

We believe that there remains strong interest in renewable energy in general and solar in particular, but existing global political and financial conditions are significantly disrupting key solar markets. Throughout 2011, there was a reduction in the then-current and expected average selling prices for PV modules. This was a result of many factors, most significantly the increased industry-wide manufacturing capacity, which has contributed to excess industry channel inventories, and a concurrent scaling back of government subsidies and incentives related to solar energy. We believe that our lightweight flexible technology is transformational in nature, and will provide us advantages in serving the building applied photovoltaic ("BAPV") and building integrated photovoltaic ("BIPV") markets, which we expect will be our largest target markets, as well as specialty markets like defense, portable power, transportation, off grid and distributed power.

We believe that our use of CIGS on a flexible, durable, lightweight, high-tech plastic substrate will allow for unique and seamless integration of our PV modules into a variety of electronic products, building materials, defense, transportation and space applications, as well as other products and applications that may emerge. We believe that the unique attributes of our materials and manufacturing process will enable a reduction in the overall system and installation cost-per-watt ratios. For markets that place a high premium on weight, such as rooftop, defense, space and near-space markets, we believe our materials should provide attractive increases in power-to-weight ratio, and we believe that our materials have higher power-to-area ratios and voltage-to-area ratios than competing flexible PV thin-film technologies. These metrics will be critical as we position ourselves to compete in commercial rooftop applications and high value-added markets like defense, transportation, space and other solar module applications where weight and seamless or elegant integration are key considerations.

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 qualification, testing and operation of our production tools to increase production. During the three months ended March 31, 2012, we had product sales of approximately \$10,000 which we do not consider sufficient for exiting development stage.

Substantially all equipment necessary for production has been delivered as of March 31, 2012. Our current production volumes are based primarily on market demand for our products in emerging and specialty markets. In March 2011, based on

Table of Contents

market conditions, we revised our near-term strategy to focus on applications for emerging and specialty markets, including off-grid, military and defense and consumer oriented products, which we believe will better leverage the unique characteristics of our product and carry higher average selling prices. We plan to re-enter the market for large scale rooftop applications in the second half of 2012.

The manufacture of photovoltaic modules is a capital-intensive business. Our unique technology enables the manufacture of differentiated PV products with high power density which are lightweight and flexible. We believe markets of substantial size will exist long term, requiring significant additional production capacity. We also believe that over time significant production volumes will be required to achieve appropriate product costs.

We plan to continue the development of our current PV technology to increase module efficiency, improve our manufacturing tooling and process capabilities and reduce manufacturing costs. We also plan to continue to take advantage of research and development contracts to fund a portion of this development.

We intend to augment our own manufacturing, product development and distribution capabilities by licensing our proprietary technology and manufacturing processes to others. We plan to continue manufacturing at our current facilities; however, our plans are to have significant future production capacity enabled through partnerships, joint ventures or other commercial or licensing arrangements. We expect such arrangements would transform our business model to one that is primarily focused on development of technologies. We plan to enable partners to commercialize such technologies in exchange for license fees, consulting revenues, non-recurring engineering fees, royalties, milestone payments, and other similar arrangements. We plan to select our partners based on their capabilities in volume manufacturing, application development, marketing, distribution, sales and service for the relevant technologies and markets. We are evaluating the timing of further expansion based on many factors that include demand, market conditions, product certification, availability of financing, technical advances, strategic partnerships and/or joint ventures and other factors.

On August 12, 2011, we completed a strategic alliance with TFG Radiant. As part of this strategic alliance, TFG Radiant acquired 6,400,000 shares of our common stock at a price of \$1.15 per share or \$7,360,000 in the aggregate. The closing price of our common stock on August 12, 2011 was \$0.73 per share. In addition, TFG Radiant received an option to acquire an additional 9,500,000 shares of our common stock at an exercise price of \$1.55 per share. The option was approved by our shareholders on October 27, 2011. TFG Radiant may not exercise this option unless and until TFG Radiant meets a specified milestone associated with the construction of the first East Asia FAB. This option expires on February 12, 2014. In addition, in exchange for the grant by us of exclusive rights to manufacture and sell solar devices based on our proprietary CIGS PV technology in East Asia (comprised of China, Taiwan, Hong Kong, Thailand, Malaysia, Indonesia, Korea and Singapore), TFG Radiant has committed to invest \$165 million to build an initial FAB in East Asia using our proprietary processes for manufacturing flexible CIGS PV, will provide consulting fees to us in connection with installation and commissioning of any FABs in East Asia, will provide license fees, royalty payments, and ownership interest in all East Asia FABs, and subject to the East Asia FABs meeting certain milestones related to production and costs, may provide, over time, incentive payments to us of up to \$250 million.

On January 4, 2012, we announced that TFG Radiant had agreed to purchase 8,067,390 shares of our common stock owned by Norsk Hydro for \$4 million, or approximately \$0.50 per share. On March 30, 2012, TFG Radiant completed the purchase of these shares and TFG Radiant's ownership became approximately 39 percent of our outstanding common stock. As a result of that transaction, on April 16, 2012, the Company appointed Mr. Winston Xu (aka Xu Biao) as a member of its Board of Directors. Mr. Xu currently serves as Chairman of Radiant Group which he founded in 1997, and as the Chairman of TFG Radiant.

On February 1, 2012, we announced the appointment of Victor Lee as President and Chief Executive Officer. Mr. Lee has served on our Board since November 2011. Mr. Lee is the managing director of Tertius Financial Group Pte Ltd, the joint venture partner with Radiant Group in TFG Radiant. As President and Chief Executive Officer, Mr. Lee will not receive any cash, equity or other compensation from the Company.

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.

As of March 31, 2012, we have remaining obligations for equipment purchases in the approximate amount of \$2.1 million, of which approximately \$0.6 million is recorded in "Accrued property, plant and equipment." 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 will depend on our continuing efforts to successfully

13

Table of Contents

ramp up the production equipment.

We are continuing the process of qualifying the production tools that have been delivered. We have additional tools on order that have not been delivered. We intend to continue to optimize our manufacturing processes including throughput, efficiency and yield to improve product performance and reduce manufacturing costs within the context of our new market focus.

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, in a timely manner;

Our ability to maintain the listing of our common stock on the NASDAQ Global Market or Capital Market and the potential impact of a delisting on the market liquidity and price volatility of our common stock.

Our ability to achieve projected operational performance and cost metrics;

Our ability to consummate strategic relationships with key partners, including 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;

The availability of, or changes to, governmental policies, subsidies and incentives that effect the use or cost of renewable energy;

Customer acceptance of and demand for our products;

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

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 to enter into commercially viable licensing, joint venture, or other commercial arrangements;

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, 2011. There have been no changes to these policies that are of potential significance to us during the three months ended March 31, 2012.

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, 2012 and 2011

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

Table of Contents

Revenues. Our revenues were approximately \$442,000 for the three months ended March 31, 2012 compared to \$1,184,000 for the three months ended March 31, 2011, a decrease of approximately \$742,000. Revenues for the three months ended March 31, 2012 include approximately \$10,000 of product sales compared to approximately \$218,000 for the three months ended March 31, 2011, a decrease of approximately \$208,000. Revenues earned on our government research and development contracts decreased by approximately \$534,000 during the same period as a result of the winding down of two government contracts that were entered into and began generating revenue in June 2010.

Research and development. Research and development costs were approximately \$4,390,000 for the three months ended March 31, 2012 compared to \$8,595,000 for the three months ended March 31, 2011, a decrease of approximately \$4,205,000. Research and development costs include the costs incurred for pre-production and production activities in our manufacturing facility and facility and equipment infrastructure costs. Research and development costs also include costs related to our governmental contracts. Costs related to pre-production and production activities decreased approximately \$3,989,000. The pre-production and production cost decreases were comprised of materials and equipment related costs of approximately \$1,638,000, depreciation and amortization of approximately \$758,000, personnel related costs of approximately \$580,000, consulting and contract services costs of approximately \$539,000 and facility related costs of approximately \$370,000. Governmental research and development expenditures decreased by approximately \$216,000. The research and development cost decrease is comprised of consulting and contract service costs of approximately \$254,000, partially offset by increases in personnel related costs of approximately \$29,000 and stock compensation expense of approximately \$9,000.

Selling, general and administrative. Selling, general and administrative expenses were approximately \$1,494,000 for the three months ended March 31, 2012 compared to \$2,454,000 for the three months ended March 31, 2011, a decrease of approximately \$960,000. This decrease is comprised of personnel related costs of approximately \$543,000, stock compensation expense of approximately \$378,000 and consulting and contract services costs of approximately \$151,000, partially offset by increases in facility and IT related expenses of approximately \$160,000.

Interest expense. Interest expense was approximately \$68,000 and \$0 for the three months ended March 31, 2012 and 2011, respectively. Interest costs of approximately \$46,000 and \$118,000 were incurred and capitalized as property, plant and equipment for the three months ended March 31, 2012 and March 31, 2011, respectively. Interest incurred relates to our CHFA loan utilized for our production facility expansion in Thornton, Colorado.

Foreign currency transaction gain (loss). Foreign currency transaction gain (loss) is calculated on cash held in foreign currencies to reflect the current exchange rate. Foreign currency transaction loss was approximately \$5,000 for the three months ended March 31, 2012 compared to foreign currency transaction gain of approximately \$195,000 for the three months ended March 31, 2011, a net change of approximately \$200,000.

Net Loss. Our Net Loss was approximately \$5,511,000 for the three months ended March 31, 2012 compared to a Net Loss of approximately \$9,655,000 for the three months ended March 31, 2011, a decrease in Net Loss of approximately \$4,144,000.

The increase in Net Loss can be summarized in variances in significant account activity as follows:

Table of Contents

| | Decrease (increase) to Net Loss For the Three Months Ended March 31, 2012 Compared to the Three Months Ended March 31, 2011 |
|---|--|
| Revenues | \$(742,089) |
| Research and development costs | |
| Manufacturing research and development | 3,896,219 |
| Government research and development | 224,703 |
| Non-cash stock based compensation | 83,926 |
| Selling, general and administrative expenses | |
| Corporate selling, general and administrative | 582,051 |
| Non-cash stock based compensation | 377,706 |
| Interest expense | (67,516) |
| Interest income | (10,358) |
| Realized gain (loss) on investments | (433) |
| Foreign currency transaction gain (loss) | (200,126) |
| Decrease to Net Loss | \$4,144,083 |

Liquidity and Capital Resources

As of March 31, 2012, we had approximately \$18.9 million in cash and investments. We also had approximately \$0.5 million in restricted cash securing equipment purchases which is included in "Other Assets" on the Condensed Balance Sheets. We have remaining obligations for equipment purchases in the approximate amount of \$2.1 million, of which approximately \$0.6 million is recorded in "Accrued property, plant and equipment."

We have commenced limited production at our manufacturing facility. We do not expect that sales revenue and cash flows will be sufficient to support operations and cash requirements until actual full production capacity is achieved. 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. We will 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.

On April 11, 2012, we received notice from The NASDAQ Stock Market ("Nasdaq") stating that because we had not regained compliance with the \$1.00 minimum bid price requirement for continued listing, our common stock (listed on The Nasdaq Global Market) would be subject to delisting unless we request a hearing before a Nasdaq Hearings Panel (the "Panel"). A hearing will stay any delisting action in connection with the notice and allow the continued listing of our common stock on The Nasdaq Global Market until the Panel renders a decision subsequent to the hearing. We requested a hearing before the Panel, which was granted and will occur in May 2012, at which time we intend to present a plan to regain compliance with the Rule and request that the Panel allow us additional time within which to regain compliance. While we believe that we will be able to present a viable plan to regain compliance, there can be no assurance that the Panel will grant our request for continued listing on The Nasdaq Global Market, or that our plans to exercise diligent efforts to maintain the listing of our common stock on the Nasdaq Global Market will be successful.

The use of cash for operational expenses averaged approximately \$1.3 million per month during the quarter ended March 31, 2012 compared to approximately \$2.5 million per month during the quarter ended March 31, 2011, a decrease of approximately \$1.2 million per month. Cash used for operational expenses is related to manufacturing and engineering activities, research and development, business development and general corporate expenses. As of April 30, 2012, we had 84 employees. Additionally we had 16 contractors provided through an employment services

provider. We expect our current cash balance to be sufficient to cover our planned capital and operational expenditures through December 31, 2012 based on currently known factors and limited projected revenues. We will need to raise additional capital to cover our operating losses and future manufacturing capacity expansion. The capital markets are currently volatile and there is no assurance that we will be able to raise additional capital on acceptable terms or at all. We currently are pursuing various avenues to obtain additional capital for further expansion. For the three months ended March 31, 2012, our cash used in operations was approximately \$4.0 million compared to approximately \$7.5 million for the three months ended March 31, 2011, a decrease of \$3.5 million. The decrease in cash used in operating activities for the year ended March 31, 2012 as compared to the same period in 2011 was primarily due to a

Table of Contents

decrease in net loss (after deducting non cash adjustments) and a decrease in inventory purchases. Partially offsetting the decrease in cash used in operations was a net decrease in other liabilities.

The total net change in cash and cash equivalents for the three months ended March 31, 2012 was an increase of approximately \$1.3 million. The increase in cash and cash equivalents was primarily the result of the maturity of available-for-sale securities and proceeds received from issuance of stock. The increase in cash and cash equivalents was partially offset by net loss (adjusted for non-cash expenses and other items such as depreciation and amortization and non-cash based stock based compensation), purchases of property, plant and equipment and repayment of debt.

On August 12, 2011, we completed a strategic alliance with TFG Radiant. As part of this strategic alliance, TFG Radiant acquired 6,400,000 shares of our common stock at a price of \$1.15 per share or \$7,360,000 in the aggregate. The closing price of our common stock on August 12, 2011 was \$0.73 per share. In addition, TFG Radiant received an option to acquire an additional 9,500,000 shares of our common stock at an exercise price of \$1.55 per share. The option was approved by our shareholders on October 27, 2011, as well as an increase in the number of authorized shares of common stock to 125,000,000. TFG Radiant may not exercise this option unless and until TFG Radiant meets a specified milestone associated with the construction of the first East Asia FAB. This option expires on February 12, 2014.

On December 29, 2011, we filed a "shelf" Registration Statement on Form S-3 with the SEC, which replaced our previously effective shelf registration. 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 \$25.0 million. The registration became effective February 14, 2012.

On January 5, 2012, we entered into an At-the-Market Offering Sales Agreement pursuant to which we may issue and sell such number of shares of our common stock having an aggregate offering price of up to \$5,000,000. Sales of common stock, if any, will be made at market prices by any method that is deemed an "at-the-market" offering as defined in Rule 415 under the Securities Act, including sales made directly on the NASDAQ stock exchange and any other trading market for our common stock, and sales to or through a market maker other than on an exchange. There is no assurance we will be able to sell shares of our common stock under this agreement at acceptable prices or at all. The aggregate compensation payable to the sales agent shall be equal to 3% of the gross sales price of the shares sold. As of March 31, 2012, 1,594,395 shares had been sold under this facility with net proceeds of \$1,234,391.

Contractual Obligations

The following table presents our contractual obligations as of March 31, 2012. Our long-term debt obligation is related to our building loan reflecting both principal and interest. Our purchase obligations include orders for equipment, inventory and operating expenses.

| Contractual Obligations | Total | Payments Due by Year (in thousands) | | | |
|-----------------------------|----------|-------------------------------------|-----------|-----------|-------------------|
| | | Less Than 1 Year | 1-3 Years | 3-5 Years | More Than 5 Years |
| Long-term debt obligations | \$11,382 | \$1,093 | \$2,081 | \$2,081 | \$6,127 |
| Operating lease obligations | 274 | 274 | — | — | — |
| Purchase obligations | 2,877 | 2,877 | — | — | — |
| Total | \$14,533 | \$4,244 | \$2,081 | \$2,081 | \$6,127 |

Off Balance Sheet Transactions

As of March 31, 2012, 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 have historically purchased manufacturing equipment internationally. As a result, we have entered into forward contracts and held accounts denominated in foreign currency in favor of equipment vendors, which exposes us to foreign currency risk.

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.

Table of Contents

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.

Generally, 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 above 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 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, 2012, 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, 2012. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of March 31, 2012, 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, 2012 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

On October 21, 2011, we were notified that a complaint (the "Lawsuit") was filed by Jefferies against us in state court located in the County and State of New York.

In December 2010, we and Jefferies entered into an engagement agreement (the "Fee Agreement") pursuant to which Jefferies was hired to act as our financial advisor in relation to certain potential transactions. In the Lawsuit, Jefferies

claims that it is entitled to receive an investment banking fee of \$3 million (plus expense reimbursement of approximately \$49,000) under the Fee Agreement in connection with the August 2011 investment and strategic alliance transaction (the “Financing”) between us and TFG Radiant.

At the August 12, 2011 closing of the Financing, we received aggregate proceeds of \$7,360,000 from the sale to TFG Radiant of 6,400,000 shares of our common stock (the “Tranche 1 Shares”) at a price of \$1.15 per share. TFG Radiant also

18

Table of Contents

received an option to purchase an additional 9,500,000 shares of Ascent stock (the “Tranche 2 Shares”) at a price of \$1.55 per share. We have not received any proceeds from the option for the Tranche 2 Shares because such option is not currently exercisable.

We have paid Jefferies the fees we believe are owed under the Fee Agreement, which are a \$100,000 retainer and approximately \$49,000 of out-of-pocket expenses. We believe that the Financing is not a covered transaction under the Fee Agreement and, accordingly, that the Lawsuit is without merit. We intend to vigorously defend the Lawsuit.

This proceeding is subject to the uncertainties inherent in any litigation. It is subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for an extended period of time. We record a liability in our financial statements for costs related to claims, including future legal costs, settlements and judgments, where we have assessed that a loss is probable and an amount can be reasonably estimated. It is not possible to predict the outcome for this legal proceeding. If the Lawsuit is determined adversely to Ascent, the costs associated with this proceeding could have a material adverse effect on our results of operations, financial position or cash flows of a future period.

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 March 22, 2012, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K filed on March 22, 2012 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 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

A list of exhibits is found on page 21 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 10th day of May, 2012.

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

| Exhibit No. | Description |
|-------------|--|
| 10.1** | At-the-Market Offering Sales Agreement Dated as of January 5, 2012 |
| 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* |
| 101.INS*** | XBRL Instance Document |
| 101.SCH*** | XBRL Taxonomy Extension Schema Document |
| 101.CAL*** | XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF*** | XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB*** | XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE*** | XBRL Taxonomy Extension Presentation Linkbase Document |

* Filed herewith.

** Previously filed as an exhibit to the Company's Current Report on Form 8-K filed January 5, 2012.

*** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Exchange Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.