

FIRST SOLAR, INC.  
Form 10-K  
February 25, 2009

**Table of Contents**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
Form 10-K**

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended December 27, 2008**
- or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the transition period from            to**

**Commission file number: 001-33156**

**First Solar, Inc.**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
*(State or other jurisdiction of  
incorporation or organization)*

**20-4623678**  
*(I.R.S. Employer  
Identification No.)*

**350 West Washington Street, Suite 600  
Tempe, Arizona 85281**  
*(Address of principal executive offices, including zip code)*  
**(602) 414-9300**  
*(Registrant's telephone number, including area code)*

**Securities registered pursuant to Section 12(b) of the Act:**

| <b>Title of each class</b>      | <b>Name of each exchange on which registered</b> |
|---------------------------------|--|
| Common stock, \$0.001 par value | The NASDAQ Stock Market LLC                      |

**Securities registered pursuant to Section 12(g) of the Act:**  
**None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes  No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was

required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

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

The aggregate market value of the registrant's common stock, \$0.001 par value per share, held by non-affiliates of the registrant on June 27, 2008, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$10,046,225,940 (based on the closing sales price of the registrant's common stock on that date). Shares of the registrant's common stock held by each officer and director and each person who owns 5% or more of the outstanding common stock of the registrant are not included in that amount, because such persons may be deemed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes. As of February 18, 2009, 81,643,905 shares of the registrant's common stock, \$0.001 par value per share, were issued and outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

The information required by Part III of this Annual Report on Form 10-K, to the extent not set forth herein, is incorporated by reference from the registrant's definitive proxy statement relating to the Annual Meeting of Shareholders to be held in 2009, which will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Annual Report on Form 10-K relates.

---

**FIRST SOLAR, INC.**

**Form 10-K for the Fiscal Year Ended December 27, 2008  
Index**

|  | <b>Page</b>                                    |
|--|--|
| <b><u>PART I</u></b>   |  |
| <u>Item 1:</u> <u>Business</u>   | 3  |
|  | <u>Executive Officers of the Registrant</u> 10 |
| <u>Item 1A:</u> <u>Risk Factors</u>  | 11   |
| <u>Item 1B:</u> <u>Unresolved Staff Comments</u>   | 23   |
| <u>Item 2:</u> <u>Properties</u>   | 24   |
| <u>Item 3:</u> <u>Legal Proceedings</u>  | 24   |
| <u>Item 4:</u> <u>Submission of Matters to a Vote of Security Holders</u>  | 24   |
| <b><u>PART II</u></b>  |  |
| <u>Item 5:</u> <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u> | 24   |
| <u>Item 6:</u> <u>Selected Consolidated Financial Data</u>   | 27   |
| <u>Item 7:</u> <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>                        | 28   |
| <u>Item 7A:</u> <u>Quantitative and Qualitative Disclosures about Market Risk</u>  | 50   |
| <u>Item 8:</u> <u>Financial Statements and Supplementary Data</u>  | 53   |
| <u>Item 9:</u> <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>                         | 54   |
| <u>Item 9A:</u> <u>Controls and Procedures</u>   | 54   |
| <u>Item 9B:</u> <u>Other Information</u>   | 55   |
| <b><u>PART III</u></b>   |  |
| <u>Item 10:</u> <u>Directors and Executive Officers of the Registrant</u>  | 55   |
| <u>Item 11:</u> <u>Executive Compensation</u>  | 55   |
| <u>Item 12:</u> <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>              | 55   |
| <u>Item 13:</u> <u>Certain Relationships and Related Transactions, and Director Independence</u>                                   | 55   |
| <u>Item 14:</u> <u>Principal Accountant Fees and Services</u>  | 56   |
| <b><u>PART IV</u></b>  |  |
| <u>Item 15:</u> <u>Exhibits and Financial Statement Schedules</u>  | 56   |
| <u>Signatures</u>  | 57   |
| <u>Consolidated Financial Statements</u>   | 60   |
| <u>Index to Exhibits</u>   | 108  |
| <u>EX-10.33</u>  |  |
| <u>EX-10.34</u>  |  |
| <u>EX-10.35</u>  |  |
| <u>EX-10.36</u>  |  |
| <u>EX-21.1</u>   |  |
| <u>EX-23.1</u>   |  |

EX-24.1

EX-31.01

EX-31.02

EX-32.01

Throughout this Annual Report on Form 10-K, we refer to First Solar, Inc. and its consolidated subsidiaries as First Solar, the Company, we, us, and our. Our fiscal years end on the last Saturday in December. Our last three fiscal years ended December 27, 2008, December 29, 2007 and December 30, 2006.

**Table of Contents**

**NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Securities Exchange Act of 1934 and the Securities Act of 1933, which are subject to risks, uncertainties and assumptions that are difficult to predict. All statements in this Annual Report on Form 10-K, other than statements of historical fact, are forward-looking statements. These forward-looking statements are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements include statements, among other things, concerning our business strategy, including anticipated trends and developments in and management plans for, our business and the markets in which we operate; future financial results, operating results, revenues, gross profit, operating expenses, products, projected costs and capital expenditures; research and development programs; sales and marketing initiatives; and competition. In some cases, you can identify these statements by forward-looking words, such as estimate, expect, anticipate, project, plan, intend, believe, forecast, foresee, likely, may, might, will, could, predict and continue, the negative or plural of these words and other comparable terminology. Forward-looking statements are only predictions based on our current expectations and our projections about future events. All forward-looking statements included in this Annual Report on Form 10-K are based upon information available to us as of the filing date of this Annual Report on Form 10-K. You should not place undue reliance on these forward-looking statements. We undertake no obligation to update any of these forward-looking statements for any reason. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to differ materially from those expressed or implied by these statements. These factors include the matters discussed in the section entitled Item 1A: Risk Factors and elsewhere in this Annual Report on Form 10-K. You should carefully consider the risks and uncertainties described under this section.

**PART I**

**Item 1: *Business***

We design and manufacture solar modules using a proprietary thin film semiconductor technology that has allowed us to reduce our average solar module manufacturing costs to among the lowest in the world. In 2008, our average manufacturing costs were \$1.08 per watt, which we believe is significantly less than those of traditional crystalline silicon solar module manufacturers. By continuing to expand production and improve our technology and manufacturing process, we believe that we can further reduce our manufacturing costs per watt and maintain our cost advantage over traditional crystalline silicon solar module manufacturers.

We manufacture our solar modules on high-throughput production lines and perform all manufacturing steps ourselves in an automated, proprietary, continuous process. Our solar modules employ a thin layer of cadmium telluride semiconductor material to convert sunlight into electricity. In less than three hours, we transform a 2ft x 4ft (60cm x 120cm) sheet of glass into a complete solar module, using approximately 1% of the semiconductor material used by other manufacturers to produce crystalline silicon solar modules. Our manufacturing process eliminates the multiple supply chain operators and expensive and time consuming batch processing steps that are used to produce a crystalline silicon solar module.

We have long-term solar module supply contracts (the Long Term Supply Contracts) with one U.S. and fifteen European project developers, system integrators and operators that in the aggregate allow for approximately \$5.8 billion (4.9 billion denominated in euro at an assumed exchange rate of \$1.15/ 1.00 and 0.2 billion denominated in USD) in sales from 2009 to 2013. During 2008, we amended a Long Term Supply Contract with one customer, which reduced the volume of solar modules delivered to such customer in 2008 and also reduced the volume of solar modules to be delivered over the remaining term of the agreement to such customer. During February 2009 we amended our Long Term Supply Contracts with two customers to accelerate the decline in the sales price per watt

under such contracts in 2009 and 2010 in exchange for increases in the volume of solar modules to be delivered under such contracts. We are currently in discussions with several other customers about making similar amendments to their Long Term Supply Contracts.

## **Table of Contents**

Our customers typically develop, own and operate solar power plants or sell turnkey solar power plants to end-users that include owners of land, owners of agricultural buildings, owners of commercial warehouses, offices and industrial buildings, public agencies, municipal government authorities, utility companies and financial investors that desire to own large scale solar power plant projects.

In order to satisfy our contractual requirements, we expanded our manufacturing capacity with the construction of four plants each with four production lines at our Malaysian manufacturing center. In August 2006, we expanded our Ohio plant from one to three production lines. In April 2007, we started initial production at a four line manufacturing plant in Germany, which reached its full capacity in the third quarter of 2007. Also in April 2007, we began construction of plant one of our Malaysian manufacturing center. In the third and fourth quarters of 2007, we began construction of plants two and three, respectively; and in the first quarter of 2008, we began construction of plant four. We completed the qualification of plants one and two of our Malaysian manufacturing center for full volume production in the second half of 2008. We expect plants three and four of our Malaysian manufacturing center to reach full capacity in the first half of 2009. Further, in October 2008, we commenced construction of our Ohio plant expansion, which is expected to include an additional production line and approximately 500,000 square feet of manufacturing, research and development and office space. We expect to complete plant construction in the first half of 2009, with full volume production expected by the second quarter of 2010. After plant four of our Malaysian manufacturing center and the Ohio expansion reach full capacity, we expect to have 24 production lines and an annual global manufacturing capacity of approximately 1145MW by the end of 2010 (based on the fourth quarter of 2008 average per line run rate at our existing plants).

## **Acquisition of Turner Renewable Energy, LLC**

On November 30, 2007, we completed the acquisition of Turner Renewable Energy, LLC, a privately held company which designed and deployed commercial solar power system projects for utilities and Fortune 500 companies in the United States. We have integrated the operations from this acquisition into our solar power systems and project development business. This business sells solar power systems directly to system owners. These systems include both our solar modules and balance of system components that we procure from third parties. We also sell integrated services related to the development of commercial solar projects in the United States, such as system design, engineering, procurement of permits and balance of system components, construction management, monitoring and maintenance as part of a system solution delivery. This acquisition has created a platform for our systems business in North America to deliver solar electricity solutions to utility companies.

## **Products**

### ***Solar Modules***

Each solar module is approximately 2ft x 4ft (60cm x 120cm) and had an average rated power of approximately 73 watts, 70 watts and 64 watts for 2008, 2007 and 2006, respectively. Our solar module is a single-junction polycrystalline thin film structure that uses cadmium telluride as the absorption layer and cadmium sulfide as the window layer. Cadmium telluride has absorption properties that are highly matched to the solar spectrum and has the potential to deliver competitive conversion efficiencies with approximately 1% of the semiconductor material used by traditional crystalline silicon solar modules. Our thin film technology also has relatively high energy performance in low light and high temperature environments compared with traditional crystalline silicon solar modules.

### ***Certifications***

We have participated, or are currently participating, in laboratory and field tests with the National Renewable Energy Laboratory, the Arizona State University Photovoltaic Testing Laboratory, the Fraunhofer Institute for Solar Energy,



TÜV Immissionsschutz und Energiesysteme GmbH and the Institute für Solar Energieversorgungstechnik. Currently, we have approximately 10,000 solar modules installed worldwide at test sites designed to collect data for field performance validation. Using data logging equipment, we also monitor more than one million solar modules, representing approximately 69MW of installed photovoltaic systems, in use by end-users that have purchased

## **Table of Contents**

systems using our solar modules. The modules in these monitored systems represent approximately 11% of all the solar modules we shipped from 2002 through 2008.

We maintain all certifications required to sell solar modules in the markets we serve or expect to serve, including UL 1703, IEC 61646, Safety Class II and CE.

### ***Solar Module Warranty***

We provide a limited warranty against defects in materials and workmanship under normal use and service conditions for five years following delivery to the owners of our solar modules. We also warrant to the owner of our solar modules that solar modules installed in accordance with agreed-upon specifications will produce at least 90% of their power output rating during the first 10 years following their installation and at least 80% of their power output rating during the following 15 years. In resolving claims under both the defects and power output warranties, we have the option of either repairing or replacing the covered solar module or, under the power output warranty, providing additional solar modules to remedy the power shortfall. Our warranties are automatically transferred from the original purchaser of our solar modules to a subsequent purchaser. As of December 27, 2008, our accrued warranty liability was \$11.9 million; of which, \$4.0 million was classified as current and \$7.9 million was classified as non-current.

### ***Collection and Recycling Program***

End-users can return their solar modules to us at any time for collection and recycling at no cost. We pre-fund the estimated collection and recycling cost at the time of sale, assuming for this purpose a minimum service life of approximately 20 years for our solar modules. In addition to achieving substantial environmental benefits, our solar module collection and recycling program may provide us the opportunity to resell or redistribute working modules or recover certain raw materials and components for reuse in our manufacturing process. We have developed a recycling process for manufacturing scrap, warranty returns and end of life modules that produces glass suitable for use in the production of new glass products and extracts metals that will be further processed by a third party supplier to produce semiconductor materials for reuse in our solar modules.

### **Services**

Our solar power systems and project development business provides a variety of integrated services to our customers as part of a system solution delivery. These services include solar power system design, procurement of permits and balance of system components, construction management, monitoring and maintenance.

### **Manufacturing**

#### ***Manufacturing Process***

We have integrated our manufacturing processes into a continuous, integrated production line with the following three stages: the deposition stage, the cell definition stage, and the assembly and test stage. In the deposition stage, panels of treated glass are robotically loaded onto the production line where they are cleaned, heated and coated with a layer of cadmium sulfide followed by a layer of cadmium telluride using our proprietary vapor transport deposition technology, after which the semiconductor-coated plates are cooled rapidly to increase strength. In our cell definition stage, we use high speed lasers to transform the large single semiconductor-coated plate into a series of interconnected cells that deliver the desired current and voltage output. Our proprietary laser scribing technology is capable of accomplishing accurate and complex scribes at high speeds. Finally, in the assembly and test stage, we apply busbars, laminate, a rear glass cover sheet and termination wires, seal the joint box and subject each solar module to a solar simulator and current leakage test. The final assembly stage is the only stage in our production line that requires

manual processing.

Historically, all of our solar modules were produced at our Perrysburg, Ohio facility, which has received both an ISO 9001:2000 quality system certification and ISO 14001:2004 environmental system certification. In April 2007, we started initial production at our manufacturing facility in Frankfurt/Oder, Germany which has received all applicable licenses and permits to operate in accordance with German law and has received both an ISO 9001:2000

## **Table of Contents**

quality system certification and ISO 14001:2004 environmental system certification. In April 2008, we started initial production at plant one of our manufacturing center in Kulim, Malaysia which has received an ISO 9001:2000 quality system certification and we anticipate the Malaysian manufacturing center will obtain an ISO 14001:2004 environmental system certification in the second quarter of 2009.

### ***Raw Materials***

Our manufacturing process uses approximately 20 types of raw materials and components to construct a complete solar module. Of these raw materials and components, the following nine are critical to our manufacturing process: TCO coated front glass, cadmium sulfide, cadmium telluride, photo resist, laminate, tempered back glass, cord plate/cord plate cap, lead wire (UL and TÜV) and solar connectors. Before we use these materials and components in our manufacturing process, a supplier must undergo a qualification process that can last up to 12 months, depending on the type of raw material or component. Although we continually evaluate new suppliers and currently are qualifying several new suppliers, a few of our critical materials or components are sole sourced and most others are supplied by a limited number of suppliers. One critical raw material in our production process is cadmium telluride.

### **Customers**

We have Long Term Supply Contracts with sixteen principal customers for the sale of solar modules. These customers include solar power system project developers, system integrators and operators of renewable energy projects that are headquartered throughout the European Union and the United States. The Long Term Supply Contracts in the aggregate allow for approximately \$5.8 billion (4.9 billion denominated in euro at an assumed exchange rate of \$1.15/ 1.00 and 0.2 billion denominated in USD) in sales from 2009 to 2013. During 2008, we amended a Long Term Supply Contract with one customer, which reduced the volume of solar modules delivered to such customer in 2008 and also reduced the volume of solar modules to be delivered over the remaining term of the agreement to such customer. During February 2009 we amended our Long Term Supply Contracts with two customers to accelerate the decline in the sales price per watt under such contracts in 2009 and 2010 in exchange for increases in the volume of solar modules to be delivered under such contracts. We are currently in discussions with several other customers about making similar amendments to their Long Term Supply Contracts.

During 2008, our principal customers were Blitzstrom GmbH, Colexon Energy AG (previously Reinecke + Pohl), Conergy AG, Juwi Solar GmbH and Phoenix Solar AG. During 2008, each of these five customers individually accounted for between 11% and 19% of our net sales. All of our other customers individually accounted for less than 10% of our net sales during 2008. The loss of any of our major customers could have an adverse effect on our business. As we expand our manufacturing capacity, we are seeking to develop additional customer relationships in other markets and regions, which would reduce our customer and geographic concentration and dependence.

### **Sales and Marketing**

Since 2003, our focus has been on grid-connected ground or large roof mounted solar power systems in Germany and other European Union countries with feed-in tariff subsidies that enable solar power system owners to earn a reasonable rate of return on their capital. Several of our principal customers were authorized in 2007 and 2008 to sell our solar modules in the United States. In November 2007, we completed the acquisition of Turner Renewable Energy, LLC, which has become the basis for developing solar electricity solutions for utility companies in the United States that are seeking cost-effective renewable energy solutions for the purpose of meeting renewable portfolio standard requirements.

### ***Economic Incentives***

Government subsidies, economic incentives and other support for solar electricity generation generally include feed-in tariffs, net metering programs, renewable portfolio standards, rebates, tax incentives and low interest loans.

Under a feed-in tariff subsidy, the government sets prices that regulated utilities are required to pay for renewable electricity generated by end-users. The prices are set above market rates and may differ based on system

## **Table of Contents**

size or application. Net metering programs enable end-users to sell excess solar electricity to their local utility in exchange for a credit against their utility bills. The policies governing net metering vary by state and utility. Some utilities pay the end-user upfront, while others credit the end-user's bill. Under a renewable portfolio standard, the government requires regulated utilities to supply a portion of their total electricity in the form of renewable electricity. Some programs further specify that a portion of the renewable energy quota must be from solar electricity, while others provide no specific technology requirement for renewable electricity generation.

Tax incentive programs exist in the United States at both the federal and state level and can take the form of investment tax credits, accelerated depreciation, sales and property tax exemptions. At the United States federal level, investment tax credits for business and residential solar systems have gone through several cycles of enactment and expiration since the 1980's. Several state governments also facilitate low interest loans for photovoltaic systems, either through direct lending, credit enhancement or other programs.

Regulations and policies relating to electricity pricing and interconnection also encourage distributive generation with photovoltaic systems. Photovoltaic systems generate most of their electricity during mid-day and the early afternoon hours when the demand for and cost of electricity is highest. As a result, electricity generated by photovoltaic systems mainly competes with expensive peak hour electricity, rather than the lower average price of electricity. Modifications to the peak hour pricing policies of utilities, such as to a flat rate, would require photovoltaic systems to achieve lower prices in order to compete with the price of electricity. In addition, interconnection policies often enable the owner of a photovoltaic system to feed solar electricity into the power grid without interconnection costs or standby fees.

## **Research, Development and Engineering**

We continue to devote a substantial amount of resources to research and development with the objective of lowering the per watt price of solar electricity generated by photovoltaic systems. With the objective of reducing the per watt manufacturing cost of electricity generated by photovoltaic systems using our solar modules, we focus our research and development on the following areas:

*Increase the conversion efficiency of our solar modules.* We believe the most promising ways of increasing the conversion efficiency of our solar modules are maximizing the number of photons that reach the absorption layer of the semiconductor material so that they can be converted into electrons, maximizing the number of electrons that reach the surface of the semiconductor and minimizing the electrical losses between the semiconductor layer and the back metal conductor.

*System optimization.* We are also working to reduce the cost and optimize the effectiveness of the other components in a photovoltaic system. We maintain a substantial effort to collect and analyze actual field performance data from photovoltaic systems that use our modules. We continuously collect data from test sites comprising approximately 10,000 modules installed in varying climates and applications. We also monitor more than one million solar modules, representing approximately 69MW of installed photovoltaic systems, in use by end-users that have purchased photovoltaic systems using our modules. We use the data collected from these sources to correlate field performance to various manufacturing and laboratory level metrics, identify opportunities for module and process improvement and improve the performance of systems that use our modules. In addition, we use this data to enhance predictive models and simulations for end-users.

Research and development expenses for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 were \$33.5 million, \$15.1 million and \$6.4 million, respectively.

We typically qualify process and product improvements for full production at our Ohio plant and then use our Copy Smart process to propagate them to our other production lines. Our scientists and engineers collaborate across all

manufacturing plants to drive improvements. We typically implement, validate and qualify improvements at the Ohio plant before we deploy them to all of our production lines. We believe that this systematic approach to research and development will provide continuous improvements and ensure uniform adoption across our production lines. In addition, our production lines are replicas of each other using our Copy Smart process, and as a result, a process or production improvement on one line can be rapidly deployed to other production lines.

## **Table of Contents**

We maintain active collaborations with the National Renewable Energy Laboratory (a division of the United States Department of Energy), Brookhaven National Laboratory and several universities.

## **Intellectual Property**

Our success depends, in part, on our ability to maintain and protect our proprietary technology and to conduct our business without infringing on the proprietary rights of others. We rely primarily on a combination of patents, trademarks and trade secrets, as well as employee and third party confidentiality agreements, to safeguard our intellectual property. As of December 27, 2008, we held 23 patents in the United States, which will expire at various times between 2009 and 2026, and had 37 patent applications pending. We also held 17 patents and had over 70 patent applications pending in foreign jurisdictions. Our patent applications and any future patent applications might not result in a patent being issued with the scope of the claims we seek, or at all, and any patents we may receive may be challenged, invalidated or declared unenforceable. We continually assess appropriate occasions for seeking patent protection for those aspects of our technology, designs and methodologies and processes that we believe provide significant competitive advantages.

As of December 27, 2008, we held two trademarks, First Solar and First Solar and Design, in the United States. We have also registered our First Solar and Design mark in China, India, Japan, Korea and the European Union and we are seeking registration in other countries.

With respect to proprietary know-how that is not patentable and processes for which patents are difficult to enforce, we rely on, among other things, trade secret protection and confidentiality agreements to safeguard our interests. We believe that many elements of our photovoltaic manufacturing process involve proprietary know-how, technology or data that are not covered by patents or patent applications, including technical processes, equipment designs, algorithms and procedures. We have taken security measures to protect these elements. All of our research and development personnel have entered into confidentiality and proprietary information agreements with us. These agreements address intellectual property protection issues and require our associates to assign to us all of the inventions, designs and technologies they develop during the course of employment with us. We also require our customers and business partners to enter into confidentiality agreements before we disclose any sensitive aspects of our solar cells, technology or business plans.

We have not been subject to any material intellectual property claims.

## **Competition**

The solar energy and renewable energy industries are both highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete within the larger electric power industry. Within the renewable energy industry, we compete with other renewable energy technologies including hydro, wind, geothermal, bio-mass and tidal. Within the solar energy industry, we believe that our main sources of competition are crystalline silicon solar module manufacturers, other thin film solar module manufacturers and companies developing solar thermal and concentrated photovoltaic technologies. Among photovoltaic module and cell manufacturers, the principal methods of competition are price per watt, production capacity, conversion efficiency and reliability.

At the end of 2008, the global photovoltaic industry consisted of more than 150 manufacturers of solar cells and modules. Within the photovoltaic industry, we face competition from numerous crystalline silicon solar cell and module manufacturers. We also face competition from thin film solar module manufacturers.

In addition, we expect to compete with future entrants to the photovoltaic industry that offer new technological solutions. We may also face competition from semiconductor manufacturers and semiconductor equipment



manufacturers or their customers, several of which have already announced their intention to start production of photovoltaic cells, solar modules or turnkey production lines. Some of these competitors are larger and have greater financial resources, larger production capacities and greater brand name recognition than we do and may, as a result, be better positioned to adapt to changes in the industry or the economy as a whole.

## **Table of Contents**

We also face competition from companies that are developing various solar thermal solutions for utility scale power plant applications. In addition to manufacturers of solar photovoltaic equipment, we face competition from companies developing concentrating photovoltaic systems and other renewable energy technologies.

Our solar power products and services also compete against other power generation sources supplied by utilities that burn conventional fossil fuels.

As we develop our solar power systems and development business and begin to offer solar electricity solutions to utilities, we expect to face competition from other providers of renewable energy solutions, including developers of photovoltaic, solar thermal and concentrated solar power systems and from developers of alternate forms of renewable energy projects.

## **Environmental Matters**

Our manufacturing operations include the use, handling, storage, transportation, generation and disposal of hazardous materials. We are subject to various federal, state, local and foreign laws and regulations relating to the protection of the environment, including those governing the discharge of pollutants into the air and water, the use, management and disposal of hazardous materials and wastes, occupational health and safety and the cleanup of contaminated sites. Therefore, we could incur substantial costs, including cleanup costs, fines and civil or criminal sanctions and costs arising from third party property damage or personal injury claims, as a result of violations of or liabilities under environmental laws or non-compliance with environmental permits required at our facilities. We believe we are currently in substantial compliance with applicable environmental requirements and do not expect to incur material capital expenditures for environmental controls in the foreseeable future. However, future developments such as more aggressive enforcement policies, the implementation of new, more stringent laws and regulations or the discovery of unknown environmental conditions may require expenditures that could have a material adverse effect on our business, results of operations and/or financial condition. See Item 1A: Risk Factors Environmental obligations and liabilities could have a substantial negative impact on our financial condition, cash flows and profitability.

## **Associates**

As of December 27, 2008, we had 3,524 associates (our term for full and part-time employees), including 2,912 in manufacturing. The remainder of our associates are in research and development, sales and marketing and general and administrative positions. None of our associates are represented by labor unions or covered by a collective bargaining agreement. As we expand domestically and internationally, however, we may encounter associates who desire union representation. We believe that our relations with our associates are good.

## **Information About Geographic Areas**

We have significant marketing, distribution and manufacturing operations both within and outside the United States. In 2008, 94% of our net sales were generated from customers headquartered in the European Union. In the future, we expect to expand our operations in other European and Asian countries, and as a result, we will be subject to the legal, tax, political, social and regulatory requirements, and economic conditions of many jurisdictions. The international nature of our operations subject us to a number of risks, including fluctuations in exchange rates, adverse changes in foreign laws or regulatory requirements, and tariffs, taxes and other trade restrictions. See Item 1A: Risk Factors Our substantial international operations subject us to a number of risks, including unfavorable political, regulatory, labor and tax conditions in foreign countries. See also Note 23, Segment and Geographical Information, to our consolidated financial statements referenced in Item 15 of this Annual Report on Form 10-K for information about our net sales by geographic region for the years ended December 27, 2008, December 29, 2007 and December 30, 2006, and see our Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 of this Annual

Report on Form 10-K for other information about our operations and activities in various geographic regions.

**Table of Contents**

**Available Information**

We maintain a website at <http://www.firstsolar.com>. We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file these materials with, or furnish them to, the SEC. The information contained in or connected to our website is not incorporated by reference into this report.

The public may also read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports and other information regarding issuers, such as First Solar, that file electronically with the SEC. The SEC's Internet website is located at <http://www.sec.gov>.

**Executive Officers of the Registrant**

Our executive officers and their ages and positions as of December 27, 2008 are as follows:

| <b>Name</b>          | <b>Age</b> | <b>Position</b>   |
|----------------------|------------|---|
| Michael J. Ahearn    | 52         | Chief Executive Officer, Chairman                                   |
| Bruce Sohn           | 47         | President, Director   |
| Jens Meyerhoff       | 44         | Chief Financial Officer   |
| John T. Gaffney      | 48         | Executive Vice President and Corporate Secretary                    |
| Mary Beth Gustafsson | 48         | Vice President, General Counsel                                     |
| John Carrington      | 42         | Executive Vice President, Global Marketing and Business Development |

Michael J. Ahearn has served as the CEO and Chairman of First Solar since August 2000. Mr. Ahearn also served as President of First Solar from August 2000 to March 2007. From 1996 until November 2006, he was a Partner and President of the equity investment firm JWMA Partners, LLC, or JWMA (formerly True North Partners, LLC). Prior to joining JWMA, Mr. Ahearn practiced law as a partner in the firm of Gallagher & Kennedy. He received both a B.A. in Finance and a J.D. from Arizona State University.

Bruce Sohn was elected a director of First Solar in July 2003 and has served as President of First Solar since March 2007. Prior to joining First Solar as President, Mr. Sohn worked at Intel Corporation for 24 years. He is a senior member of IEEE and a certified Jonah. Mr. Sohn has been a guest lecturer at several universities, including the Massachusetts Institute of Technology and Stanford University. He graduated from the Massachusetts Institute of Technology with a degree in Materials Science and Engineering.

Jens Meyerhoff joined First Solar in May 2006 as Chief Financial Officer. Prior to joining First Solar, Mr. Meyerhoff was the Chief Financial Officer of Virage Logic Corporation, a provider of embedded memory intellectual property for the design of integrated circuits, from January 2006 to May 2006. Mr. Meyerhoff was employed by FormFactor, Inc., a manufacturer of advanced wafer probe cards, as Chief Operating Officer from April 2004 to July 2005, Senior Vice President of Operations from January 2003 to April 2004 and Chief Financial Officer from August 2000 to March 2005. Mr. Meyerhoff holds a German Wirtschaftsinformatiker degree, which is the equivalent of a Finance and Information Technology degree, from Daimler Benz's Executive Training Program.

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

John T. Gaffney joined First Solar in January 2008 as Executive Vice President and Corporate Secretary. Prior to joining First Solar, Mr. Gaffney practiced law at the firm of Cravath, Swaine & Moore LLP, where he was a partner since 1993. During his time at Cravath, Mr. Gaffney served as a key advisor to First Solar and advised numerous corporate and financial institution clients on merger, acquisition and capital markets transactions. Mr. Gaffney holds a B.A. from The George Washington University and an M.B.A. and J.D. from New York University.

Mary Beth Gustafsson joined First Solar in October 2008 as Vice President, General Counsel. Prior to joining First Solar, Ms. Gustafsson was the Senior Vice President, General Counsel and Secretary of Trane Inc. (formerly American Standard Companies Inc.) from January 2005 through June 2008. From June 2008 through September

## **Table of Contents**

2008, Ms. Gustafsson was Vice President and Deputy General Counsel of Ingersoll-Rand Ltd., following Ingersoll-Rand's acquisition of Trane. From 2001 through 2005, Ms. Gustafsson held positions of increasing responsibility at American Standard Companies Inc., including Chief Corporate Counsel and General Counsel for the company's global air conditioning business. Ms. Gustafsson holds a B.A. in English Literature from Boston University, and a J.D. from The University of Michigan Law School.

John Carrington joined First Solar in May 2008 as Executive Vice President, Global Marketing & Business Development. Mr. Carrington brings extensive global marketing experience from his leadership positions with General Electric spanning more than 15 years. Mr. Carrington previously served as general manager and chief marketing officer of General Electric Plastics (recently sold and re-named SABIC Innovative Plastics). While at GE, he also served as General Manager of automotive marketing in Tokyo, Japan; Pacific Marketing Director in Tokyo; and Commercial Director for GE's Noryl resin business in Selkirk, New York. Mr. Carrington holds a B.A. in Economics and Marketing from the University of Colorado.

### **Item 1A: Risk Factors**

An investment in our stock involves a high degree of risk. You should carefully consider the following information, together with the other information in this Annual Report on Form 10-K, before buying shares of our stock. If any of the following risks or uncertainties occur, our business, financial condition and results of operations could be materially and adversely affected and the trading price of our stock could decline.

***An increase in interest rates or lending rates or tightening of the supply of capital in the global financial markets could make it difficult for end-users to finance the cost of a PV system and could reduce the demand for our solar modules and/or lead to a reduction in the average selling price for photovoltaic modules.***

Many of our end-users depend on debt financing to fund the initial capital expenditure required to purchase and install a PV system. As a result, an increase in interest rates or lending rates could make it difficult for our end-users to secure the financing necessary to purchase and install a PV system on favorable terms, or at all and thus lower demand for our solar modules and reduce our net sales. Due to the overall economic outlook, our end-users may change their decision or change the timing of their decision to purchase and install a PV system. In addition, we believe that a significant percentage of our end-users install PV systems as an investment, funding the initial capital expenditure through a combination of equity and debt. An increase in interest rates and/or lending rates could lower an investor's return on investment in a PV system, or make alternative investments more attractive relative to PV systems, and, in each case, could cause these end-users to seek alternative investments. A reduction in the supply of project debt financing or tax equity investments could reduce the number of solar projects that receive financing and thus lower demand for solar modules.

We currently sell a substantial portion of our solar modules under Long Term Supply Contracts, and we allocate a significant amount of our production to satisfy our obligations under these contracts. These customers buy our modules with the expectation that they will be able to resell them in connection with the development of PV systems. As discussed above, many of these projects depend on the availability of debt and equity financing. A prolonged, material disruption to the supply of project finance could adversely affect our customers' ability to perform under these agreements. In the event of default by one or more of these customers, we may be unable to sell these modules at the prices specified in our Long Term Supply Contracts, especially if demand for PV systems softens or supplies of solar modules increase. Also, we may decide to lower our average selling price to certain customers in certain markets in response to changes in economic circumstances of our customers, their end markets or the capital markets.

***We currently depend on a limited number of customers, with five customers accounting for substantially all of our net sales last year. The loss of, or a significant reduction in orders from, any of these customers could significantly***

*reduce our net sales and negatively impact our operating results.*

We currently sell substantially all of our solar modules to customers headquartered throughout the European Union. During 2008, our five largest customers each accounted for between 11% and 19% of our net sales. The loss

## **Table of Contents**

of any of our large customers, their inability to perform under their contracts, or their default in payment could significantly reduce our net sales and adversely impact our operating results. Our customers face significant challenges under current economic conditions, including lack of capital to finance solar projects and rising costs associated with leasing or otherwise acquiring land and rooftops for solar projects. We believe that we can mitigate this risk by re-allocating modules to other customers if the need arises, but we may be unable, in whole or in part, to mitigate the reduced demand for our modules. In the event that we determine that our planned production of solar modules exceeds the demand we anticipate, we may decide to reduce or halt production of solar modules in our manufacturing facilities. However, we may be unable to anticipate and respond to the oversupply of solar modules because we have limited visibility into our customers' inventories.

***Our limited operating history may not serve as an adequate basis to judge our future prospects and results of operations.***

We have a limited operating history. Although we began developing our predecessor technology in 1987, we did not launch commercial operations until we qualified our pilot production line in January 2002. We qualified the first production line at our Ohio plant in November 2004, the second and third production lines at our Ohio plant in August 2006, our German plant in the third quarter of 2007, and portions of our Malaysian plants in 2008. Because these production lines have only been in operation for a limited period of time, our historical operating results may not provide a meaningful basis for evaluating our business, financial performance and prospects. While our net sales grew from \$48.1 million in 2005 to \$1,246.3 million in 2008, we may be unable to achieve similar growth, or grow at all, in future periods. Our ability to achieve similar growth in future periods is also affected by current economic conditions. Our past results occurred in an environment where, among other things, capital was generally more accessible to our customers to finance the cost of developing solar projects. Accordingly, you should not rely on our results of operations for any prior period as an indication of our future performance.

***We face intense competition from manufacturers of crystalline silicon solar modules, thin film solar modules and solar thermal and concentrated photovoltaic systems; if global supply exceeds global demand, it could lead to a reduction in the average selling price for photovoltaic modules.***

The solar energy and renewable energy industries are both highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with the larger electric power industry. Within the global photovoltaic industry, we face competition from crystalline silicon solar module manufacturers, other thin film solar module manufacturers and companies developing solar thermal and concentrated photovoltaic technologies.

Even if demand for solar modules continues to grow, the rapid expansion plans of many solar cell and module manufacturers could create periods where supply exceeds demand. In addition, we believe the significant decrease in the cost of silicon feedstock will provide significant reductions in the manufacturing cost of crystalline silicon solar modules and lead to pricing pressure for solar modules and potentially the oversupply of solar modules, including in key markets such as Germany and Spain.

During any such period, our competitors could decide to reduce their sales price, even below their manufacturing cost, in order to generate sales. As a result, we may be unable to sell our solar modules at attractive prices, or for a profit, during any period of excess supply of solar modules, which would reduce our net sales and adversely affect our results of operations. Also, we may decide to lower our average selling price to certain customers in certain markets in response to competition.

***Thin film technology has a short history and our thin film technology and solar modules may perform below expectations; problems with product quality or performance may cause us to incur warranty expenses, damage our market reputation and prevent us from maintaining or increasing our market share.***



Researchers began developing thin film semiconductor technology over 20 years ago, but were unable to integrate the technology into a solar module production line until recently. Our oldest active production line has only been in operation since November 2004 and the oldest solar modules manufactured during the qualification of

## **Table of Contents**

our pilot line have only been in use since 2001. As a result, our thin film technology and solar modules do not have a sufficient operating history to confirm how our solar modules will perform over their estimated 25-year useful life. We perform a variety of quality and life tests under different conditions. However, if our thin film technology and solar modules perform below expectations, we could lose customers and face substantial warranty expense.

Our solar modules are sold with a five year materials and workmanship warranty for technical defects and a twenty-five year warranty against declines of more than 10% of their initial rated power in the first 10 years following their installation and 20% of initial rated power in the following 15 years, respectively. As a result, we bear the risk of extensive warranty claims long after we have sold our solar modules and recognized net sales. As of December 27, 2008, our accrued warranty liability was \$11.9 million; of which, \$4.0 million was classified as current and \$7.9 million was classified as non-current.

While our power output warranty extends for twenty-five years, our oldest solar modules manufactured during the qualification of our pilot production line have only been in use since 2001. Because of the limited operating history of our solar modules, we have been required to make assumptions regarding the durability and reliability of our solar modules. Our assumptions could prove to be materially different from the actual performance of our solar modules, causing us to incur substantial expense to repair or replace defective solar modules in the future. For example, our glass-on-glass solar modules could break, delaminate or experience power degradation in excess of expectations. Any widespread product failures may damage our market reputation and cause our sales to decline and require us to repair or replace the defective modules, which could have a material adverse effect on our financial results.

***If our estimates regarding the future cost of collecting and recycling our solar modules are incorrect, we could be required to accrue additional expenses at and from the time we realize our estimates are incorrect and face a significant unplanned cash burden when our end-users return their solar modules.***

We pre-fund our estimated future obligation for collecting and recycling our solar modules based on the present value of the expected future cost of collecting and recycling the modules, which, includes the cost of packaging the solar modules for transport, the cost of freight from the solar module s installation site to a recycling center, the material, labor and capital costs of the recycling process and an estimated third-party profit margin and return on risk for collection and recycling. We base our estimate on our experience collecting and recycling solar modules that do not pass our quality control tests and solar modules returned under our warranty and on our expectations about future developments in recycling technologies and processes and about economic conditions at the time the solar modules will be collected and recycled. If our estimates prove incorrect, we could be required to accrue additional expenses at and from the time we realize our estimates are incorrect and also face a significant unplanned cash burden at the time we realize our estimates are incorrect or end-users return their solar modules, which could harm our operating results. In addition, our end-users can return their solar modules at any time. As a result, we could be required to collect and recycle our solar modules earlier than we expect and before recycling technologies and processes improve

***Our failure to further refine our technology and develop and introduce improved photovoltaic products could render our solar modules uncompetitive or obsolete and reduce our net sales and market share.***

We will need to invest significant financial resources in research and development to keep pace with technological advances in the solar energy industry. However, research and development activities are inherently uncertain and we could encounter practical difficulties in commercializing our research results. Our significant expenditures on research and development may not produce corresponding benefits. Other companies are developing a variety of competing photovoltaic technologies, including copper indium gallium diselenide and amorphous silicon, which could produce solar modules that prove more cost-effective or have better performance than our solar modules. As a result, our solar modules may be rendered obsolete by the technological advances of our competitors, which could reduce our net sales and market share.



**Table of Contents**

***If photovoltaic technology is not suitable for widespread adoption, or if sufficient demand for solar modules does not develop or takes longer to develop than we anticipate, our net sales may flatten or decline and we may be unable to sustain profitability.***

The solar energy market is at a relatively early stage of development and the extent to which solar modules will be widely adopted is uncertain. If photovoltaic technology proves unsuitable for widespread adoption or if demand for solar modules fails to develop sufficiently, we may be unable to grow our business or generate sufficient net sales to sustain profitability. In addition, demand for solar modules in our targeted markets including Germany, Spain, France, Italy and the United States may not develop or may develop to a lesser extent than we anticipate. Many factors may affect the viability of widespread adoption of photovoltaic technology and demand for solar modules, including the following:

cost-effectiveness of solar modules compared to conventional and other non-solar renewable energy sources and products, including conventional energy sources such as natural gas that have experienced recent price reductions making it more difficult for PV plants to compete on a cost per watt basis;

performance and reliability of solar modules and thin film technology compared to conventional and other non-solar renewable energy sources and products;

availability and substance of government subsidies and incentives to support the development of the solar energy industry;

success of other renewable energy generation technologies, such as hydroelectric, tidal, wind, geothermal, solar thermal, concentrated photovoltaic, and biomass;

fluctuations in economic and market conditions that affect the price of, and demand for, conventional and non-solar renewable energy sources, such as increases or decreases in the price of oil, natural gas and other fossil fuels;

fluctuations in capital expenditures by end-users of solar modules, which tend to decrease when the economy slows and interest rates increase; and

deregulation of the electric power industry and the broader energy industry to permit wide spread adoption of solar electricity.

***Reduced growth in or the reduction, elimination or expiration of government subsidies, economic incentives and other support for on-grid solar electricity applications could reduce demand for our solar modules, lead to a reduction in our net sales and adversely impact our operating results.***

Reduced growth in or the reduction, elimination or expiration of government subsidies, economic incentives and other support for on-grid solar electricity may result in the diminished competitiveness of solar energy relative to conventional and non-solar renewable sources of energy, and could materially and adversely affect the growth of the solar energy industry and our net sales. We believe that the near-term growth of the market for on-grid applications, where solar energy is used to supplement the electricity a consumer purchases from the utility network, depends significantly on the availability and size of government subsidies and economic incentives. Federal, state and local governmental bodies in many countries, most notably Germany, Italy, Spain, France, Greece, Portugal, South Korea, Japan, Canada and the United States, have provided subsidies in the form of feed-in tariffs, rebates, tax incentives and other incentives to end-users, distributors, systems integrators and manufacturers of photovoltaic products. Many of these government incentives expire, phase out over time or require renewal by the applicable authority.

For example, the German Renewable Energy Law, or the EEG, has recently been modified by the German Government. Feed-in-tariffs were significantly reduced compared with the former legislation. The amended law became effective January 1, 2009. German subsidies now decline at a rate of between 8.0% and 10% in 2009 (based on the type of the photovoltaic system) instead of between 5% and 6.5% prior to effective date of the amendment. The rate of decrease is subject to change based on the overall market growth. For example, the rate of decrease in feed-in-tariffs in 2010 will be increased by 1% in case the market will be larger than 1500 MW or decreased by 1% if it is smaller than 1000 MW. The next review of feed-in-tariffs is scheduled for 2012; however, earlier adjustments

## **Table of Contents**

are possible. If the German government reduces or eliminates the subsidies under the EEG, demand for photovoltaic products could significantly decline in Germany.

In Spain, which accounted for approximately 6% of our net sales, the Spanish government published a new decree for photovoltaics on September 27, 2008, which became effective on September 28, 2008. The new legislation replaces the previous decree, from which it differs in some basic respects. It distinguishes between system types, namely between roof-mounted and ground-mounted systems, it implements a flexible mechanism that links the feed-in-tariffs to market development along with annual caps and it introduces a mechanism of licenses for installations that will be given out in four quarterly rounds per annum. The decree fixed an initial annual cap of 400 MW, of which 267 MW is reserved for roof installations and 133 MW for ground-mounted systems. For 2009 and 2010, additional volumes of 100 MW and 60 MW, respectively, are reserved for ground-mounted systems. A decision about a new compensation structure is not expected before 2012. With the annual market expansion capped for the next three years and feed-in-tariffs significantly reduced under the revised Spanish Royal Decree, demand for photovoltaic products in Spain is expected to decline significantly.

In the United States, California has been the State where the majority of solar installations have taken place during the past five years. Starting January 1, 2007, the California Solar Initiative (CSI) has established a goal of installing 3000MW of solar generation capacity by 2016 with a State budget of \$2.2 billion over 10 years. The incentive level available to a given project is determined by the currently available incentive in each utility territory for each customer class. The CSI was designed so that the incentive level decreases over ten steps, after which it goes to \$0, as the total demand for solar energy grows.

In October 2008, the United States Congress extended the 30% federal investment tax credit for both residential and commercial solar installations for eight years, through December 31, 2016. On February 17, 2009, the American Recovery and Reinvestment Act of 2009 was signed into law. In addition to adopting certain fiscal stimulus measures that could benefit on-grid solar electricity applications, this act creates a new program, through the Department of the Treasury, which provides grants equal to 30% of the cost of solar installations that are placed into service during 2009 and 2010 or that begin construction prior to December 31, 2010 and are placed into service by January 1, 2017. This grant is available in lieu of receiving the 30% federal investment tax credit. Other measures adopted by the American Recovery and Reinvestment Act of 2009 that could benefit on-grid solar electricity generation include the following: (1) a Department of Energy loan guarantee program for renewable energy projects, renewable energy manufacturing facilities and electric power transmission projects and (2) a 30% investment credit for assets used to manufacture technology for the production of renewable energy.

Emerging subsidy programs, such as the programs in Italy, France, Greece, South Korea and Ontario, Canada, may require an extended period of time to attain effectiveness because the applicable permitting and grid connection processes associated with these programs can be lengthy and administratively burdensome.

In addition, if any of these statutes or regulations is found to be unconstitutional, or is reduced or discontinued for other reasons, sales of our solar modules in these countries could decline significantly, which could have a material adverse effect on our business and results of operations. For example, the predecessor to the German EEG was challenged in Germany on constitutional grounds and in the European Court of Justice as impermissible state aid. Although the German Federal High Court of Justice dismissed these constitutional concerns and the European Court of Justice held that the purchase requirement at minimum feed-in tariffs did not constitute impermissible state aid, new proceedings challenging the German EEG or comparable minimum price regulations in other countries in which we currently operate or intend to operate may be initiated.

Electric utility companies or generators of electricity from fossil fuels or other renewable energy sources could also lobby for a change in the relevant legislation in their markets to protect their revenue streams. Reduced growth in or

the reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar energy applications, especially those in our target markets, could cause our net sales to decline and materially and adversely affect our business, financial condition and results of operations.

*Many of our key raw materials and components are either sole-sourced or sourced by a limited number of third-party suppliers and their failure to perform could cause manufacturing delays and impair our*

**Table of Contents**

***ability to deliver solar modules to customers in the required quality and quantities and at a price that is profitable to us.***

Our failure to obtain raw materials and components that meet our quality, quantity and cost requirements in a timely manner could interrupt or impair our ability to manufacture our solar modules or increase our manufacturing cost. Many of our key raw materials and components are either sole-sourced or sourced by a limited number of third-party suppliers. As a result, the failure of any of our suppliers to perform could disrupt our supply chain and impair our operations. In addition, many of our suppliers are small companies that may be unable to supply our increasing demand for raw materials and components as we implement our planned rapid expansion. We may be unable to identify new suppliers or qualify their products for use on our production lines in a timely manner and on commercially reasonable terms. Raw materials and components from new suppliers may also be less suited for our technology and yield solar modules with lower conversion efficiencies, higher failure rates and higher rates of degradation than solar modules manufactured with the raw materials from our current suppliers. A constraint on our production may cause us to be unable to meet our obligations under our Long Term Supply Contracts, which would have an adverse impact on our financial results.

***A disruption in our supply chain for cadmium telluride, our semiconductor material, could interrupt or impair our ability to manufacture solar modules.***

A key raw material we use in our production process is a cadmium telluride compound. Tellurium is mainly produced as a by-product of copper refining and its supply is therefore dependent upon demand for copper. Currently, we purchase these raw materials from a limited number of suppliers. If our current suppliers or any of our future suppliers are unable to perform under their contracts or purchase orders, our operations could be interrupted or impaired. In addition, because our suppliers must undergo a lengthy qualification process, we may be unable to replace a lost supplier in a timely manner and on commercially reasonable terms. Our supply of cadmium telluride could also be limited if any of our current suppliers or any of our future suppliers is unable to acquire an adequate supply of tellurium in a timely manner or at commercially reasonable prices. If our competitors begin to use or increase their demand for cadmium telluride, supply could be reduced and prices could increase. If our current suppliers or any of our future suppliers cannot obtain sufficient tellurium, they could substantially increase prices or be unable to perform under their contracts. We may be unable to pass increases in the cost of our raw materials through to our customers because our customer contracts do not adjust for raw material price increases and are generally for a longer term than our raw material supply contracts. A reduction in our production could result in our inability to meet our commitments under our Long Term Supply Contracts, all of which would have an adverse impact on our financial results.

***Our future success depends on our ability to build new manufacturing plants and add production lines in a cost-effective manner, both of which are subject to risks and uncertainties.***

Our future success depends on our ability to significantly increase both our manufacturing capacity and production throughput in a cost-effective and efficient manner. If we cannot do so, we may be unable to expand our business, decrease our cost per watt, maintain our competitive position, satisfy our contractual obligations or sustain profitability. Our ability to expand production capacity is subject to significant risks and uncertainties, including the following:

making changes to our production process that are not properly qualified or that may cause problems with the quality of our solar modules;

delays and cost overruns as a result of a number of factors, many of which may be beyond our control, such as our inability to secure successful contracts with equipment vendors;



our custom-built equipment may take longer and cost more to manufacture than expected and may not operate as designed;

delays or denial of required approvals by relevant government authorities;

**Table of Contents**

being unable to hire qualified staff; and

failure to execute our expansion plans effectively.

***If our future production lines are not built in line with our committed schedules or do not achieve operating metrics similar to our existing production lines, our solar modules could perform below expectations and cause us to lose customers.***

Currently, our production lines have a limited history of operating at full capacity. Future production lines could produce solar modules that have lower efficiencies, higher failure rates and higher rates of degradation than solar modules from our existing production lines, and we could be unable to determine the cause of the lower operating metrics or develop and implement solutions to improve performance. The second and third production lines at our Ohio plant, completed in August 2006, represent a standard building block that we replicated twice to build the four production lines at our German plant. We are using the same systematic replication process to build our Malaysian manufacturing center and future production facilities, including expansion of our existing production facilities. Our replication risk in connection with building production lines at our Malaysian manufacturing center and other future manufacturing plants could be higher than our replication risk was in expanding the Ohio plant because these new production lines are located internationally, which could entail other factors that will lower their operating metrics. If we are unable to systematically replicate our production lines to meet our committed schedules and achieve and sustain similar operating metrics in our Malaysian manufacturing center and future production lines as we have achieved at our existing production lines, our manufacturing capacity could be substantially constrained, our manufacturing costs per watt could increase, and we could lose customers, causing lower net sales, higher liabilities and lower net income than we anticipate. In addition, we might be unable to produce enough solar modules to satisfy our contractual requirements under our Long Term Supply Contracts.

***Some of our manufacturing equipment is customized and sole sourced. If our manufacturing equipment fails or if our equipment suppliers fail to perform under their contracts, we could experience production disruptions and be unable to satisfy our contractual requirements.***

Some of our manufacturing equipment is customized to our production lines based on designs or specifications that we provide to the equipment manufacturer, which then undertakes a specialized process to manufacture the custom equipment. As a result, the equipment is not readily available from multiple vendors and would be difficult to repair or replace if it were to become damaged or stop working. If any piece of equipment fails, production along the entire production line could be interrupted and we could be unable to produce enough solar modules to satisfy our contractual requirements under our Long Term Supply Contracts. In addition, the failure of our equipment suppliers to supply equipment in a timely manner or on commercially reasonable terms could delay our expansion plans and otherwise disrupt our production schedule or increase our manufacturing costs, all of which would adversely impact our financial results.

***If we are unable to further increase the number of sellable watts per solar module and reduce our manufacturing cost per watt, we will be in default under certain of our Long Term Supply Contracts and our profitability could decline.***

Our Long Term Supply Contracts either (1) require us to increase the minimum average number of watts per module over the term of the contract or (2) have a price adjustment for increases or decreases in the number of watts per module relative to a base number of watts per module. Our failure to achieve these metrics could reduce our profitability or allow some of our customers to terminate their contracts. In addition, all of our Long Term Supply Contracts specify a sales price per watt that declines by approximately 6.5% at the beginning of each year through the

expiration date of each contract in 2012. Our profitability could decline if we are unable to reduce our manufacturing cost per watt by at least the same rate at which our contractual prices decrease. Furthermore, our failure to reduce cost per watt by increasing our efficiency may impair our ability to enter new markets that we believe will require lower cost per watt for us to be competitive and may impair our growth plans.

**Table of Contents**

***Existing regulations and policies and changes to these regulations and policies may present technical, regulatory and economic barriers to the purchase and use of photovoltaic products, which may significantly reduce demand for our solar modules.***

The market for electricity generation products is heavily influenced by foreign, federal, state and local government regulations and policies concerning the electric utility industry, as well as policies promulgated by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation. In the United States and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. These regulations and policies could deter end-user purchases of photovoltaic products and investment in the research and development of photovoltaic technology. For example, without a mandated regulatory exception for photovoltaic systems, utility customers are often charged interconnection or standby fees for putting distributed power generation on the electric utility grid. These fees could increase the cost to our end-users of using photovoltaic systems and make them less desirable, thereby harming our business, prospects, results of operations and financial condition. In addition, electricity generated by photovoltaic systems mostly competes with expensive peak hour electricity, rather than the less expensive average price of electricity. Modifications to the peak hour pricing policies of utilities, such as to a flat rate, would require photovoltaic systems to achieve lower prices in order to compete with the price of electricity from other sources.

We anticipate that our solar modules and their installation will be subject to oversight and regulation in accordance with national and local ordinances relating to building codes, safety, environmental protection, utility interconnection and metering and related matters. It is difficult to track the requirements of individual states and design equipment to comply with the varying standards. Any new government regulations or utility policies pertaining to our solar modules may result in significant additional expenses to us, our resellers and their customers and, as a result, could cause a significant reduction in demand for our solar modules.

***Environmental obligations and liabilities could have a substantial negative impact on our financial condition, cash flows and profitability.***

Our operations involve the use, handling, generation, processing, storage, transportation and disposal of hazardous materials and are subject to extensive environmental laws and regulations at the national, state, local and international level. These environmental laws and regulations include those governing the discharge of pollutants into the air and water, the use, management and disposal of hazardous materials and wastes, the cleanup of contaminated sites and occupational health and safety. We have incurred and will continue to incur significant costs and capital expenditures in complying with these laws and regulations. In addition, violations of, or liabilities under, environmental laws or permits may result in restrictions being imposed on our operating activities or in our being subjected to substantial fines, penalties, criminal proceedings, third party property damage or personal injury claims, cleanup costs or other costs. While we believe we are currently in substantial compliance with applicable environmental requirements, future developments such as more aggressive enforcement policies, the implementation of new, more stringent laws and regulations, or the discovery of presently unknown environmental conditions may require expenditures that could have a material adverse effect on our business, results of operations and financial condition.

In addition, our products contain cadmium telluride and cadmium sulfide. Elemental cadmium and certain of its compounds are regulated as hazardous due to the adverse health effects that may arise from human exposure. Although the risks of exposure to cadmium telluride are not believed to be as serious as those relating to exposure to elemental cadmium, the chemical, physical and toxicological properties of cadmium telluride have not been thoroughly investigated and reported. We maintain engineering controls to minimize our associates' exposure to cadmium or cadmium compounds and require our associates who handle cadmium compounds to follow certain safety procedures, including the use of personal protective equipment such as respirators, chemical goggles and protective clothing. In addition, we believe the risk of exposure to cadmium or cadmium compounds from our end-products is

limited by the fully encapsulated nature of these materials in our products, the physical properties of cadmium compounds used in our products as well as the implementation in 2005 of our end of life collection and recycling program for our solar modules. While we believe that these factors and procedures are sufficient to protect our associates, end-users and the general public from cadmium exposure, we cannot assure that human or

## **Table of Contents**

environmental exposure to cadmium or cadmium compounds used in our products will not occur. Any such exposure could result in future third-party claims against us, as well as damage to our reputation and heightened regulatory scrutiny of our products, which could limit or impair our ability to sell and distribute our products. The occurrence of future events such as these could have a material adverse effect on our business, financial condition or results of operations.

The use of cadmium in various products is also coming under increasingly stringent governmental regulation. Future regulation in this area could impact the manufacture, sale, collection and recycling of cadmium-containing solar modules and could require us to make unforeseen environmental expenditures or limit our ability to sell and distribute our products. For example, the European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment, or the WEEE Directive, requires manufacturers of certain electrical and electronic equipment to be financially responsible for the collection, recycling, treatment and disposal of specified products sold in the European Union. In addition, European Union Directive 2002/95/EC on the Restriction of the Use of Hazardous Substances in electrical and electronic equipment, or the RoHS Directive, restricts the use of certain hazardous substances, including cadmium, in specified products. Other jurisdictions are considering adopting similar legislation. Currently, photovoltaic solar modules in general are not subject to the WEEE or RoHS Directives; however, these directives allow for future amendments subjecting additional products to their requirements and the scope, applicability and the products included in the WEEE and RoHS Directives may change. In December 2008, the European Commission issued its planned revisions of both the WEEE and RoHS Directives. The revisions did not include photovoltaic solar modules in the scope of either directive. The revisions will now be considered by both the European Parliament and the EU Members States as part of the normal European Union legislative process, which is likely to take one to two years. If, in the future, our solar modules become subject to requirements of the WEEE and RoHS Directives, we may be required to apply for an exemption. If we were unable to obtain an exemption, we would be required to redesign our solar modules in order to continue to offer them for sale within the European Union, which would be impractical. Failure to comply with these directives could result in the imposition of fines and penalties, the inability to sell our solar modules in the European Union, competitive disadvantages and loss of net sales, all of which could have a material adverse effect on our business, financial condition and results of operations.

***We may not realize the anticipated benefits of past or future acquisitions, and integration of these acquisitions may disrupt our business and management.***

In November 2007, we acquired Turner Renewable Energy, LLC and in the future, we may acquire additional companies, products or technologies. We may not realize the anticipated benefits of an acquisition and each acquisition has numerous risks. These risks include the following:

difficulty in assimilating the operations and personnel of the acquired company;

difficulty in effectively integrating the acquired technologies or products with our current products and technologies;

difficulty in maintaining controls, procedures and policies during the transition and integration;

disruption of our ongoing business and distraction of our management and employees from other opportunities and challenges due to integration issues;

difficulty integrating the acquired company's accounting, management information and other administrative systems;

inability to retain key technical and managerial personnel of the acquired business;

inability to retain key customers, vendors and other business partners of the acquired business;

inability to achieve the financial and strategic goals for the acquired and combined businesses;

incurring acquisition-related costs or amortization costs for acquired intangible assets that could impact our operating results;

**Table of Contents**

potential impairment of our relationships with employees, customers, partners, distributors or third party providers of technology or products;

potential failure of the due diligence processes to identify significant issues with product quality, architecture and development or legal and financial liabilities, among other things;

potential inability to assert that internal controls over financial reporting are effective;

potential inability to obtain, or obtain in a timely manner, approvals from governmental authorities, which could delay or prevent such acquisitions; and

potential delay in customer purchasing decisions due to uncertainty about the direction of our product offerings.

Mergers and acquisitions of companies are inherently risky, and ultimately, if we do not complete the integration of acquired businesses successfully and in a timely manner, we may not realize the anticipated benefits of the acquisitions to the extent anticipated, which could adversely affect our business, financial condition or results of operations.

***We may be unable to manage the expansion of our operations effectively.***

We expect to expand our business significantly in order to meet our contractual obligations, satisfy demand for our solar modules and increase market share. In August 2006, we expanded our Ohio plant from one to three production lines. In April 2007, we started initial production at our four line manufacturing plant in Germany, which reached full capacity in the third quarter of 2007. Also in April 2007, we began construction of plant one of our Malaysian manufacturing center. In the third and fourth quarters of 2007, we began construction of plants two and three respectively, and in the first quarter of 2008, we began construction of plant four. In the second half of 2008 we started construction of a one line expansion at our plant in Ohio. Following the completion of plant four of our Malaysian manufacturing center and the expansion of our Ohio plant, we will have grown from one production line to 24 production lines with an annual global manufacturing capacity of approximately 1145MW in four years (based on the fourth quarter of 2008 average per line run rate at our existing plants).

To manage the rapid expansion of our operations, we will be required to improve our operational and financial systems, procedures and controls and expand, train and manage our growing associate base. Our management will also be required to maintain and expand our relationships with customers, suppliers and other third parties and attract new customers and suppliers. In addition, our current and planned operations, personnel, systems and internal procedures and controls might be inadequate to support our future growth. If we cannot manage our growth effectively, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures.

***Our substantial international operations subject us to a number of risks, including unfavorable political, regulatory, labor and tax conditions in foreign countries.***

We have significant marketing, distribution and manufacturing operations both within and outside the United States. In 2008, 94% of our net sales were generated from customers headquartered in the European Union. In the future, we expect to expand our operations in other European and Asian countries; and as a result, we will be subject to the legal, political, social and regulatory requirements, and economic conditions of many jurisdictions. Risks inherent to international operations, include, but are not limited to, the following:



difficulty in enforcing agreements in foreign legal systems;

foreign countries may impose additional withholding taxes or otherwise tax our foreign income, impose tariffs or adopt other restrictions on foreign trade and investment, including currency exchange controls;

fluctuations in exchange rates may affect product demand and may adversely affect our profitability in U.S. dollars to the extent the price of our solar modules and cost of raw materials, labor and equipment is denominated in a foreign currency;

inability to obtain, maintain or enforce intellectual property rights;

**Table of Contents**

risk of nationalization of private enterprises;

changes in general economic and political conditions in the countries in which we operate, including changes in the government incentives we are relying on;

unexpected adverse changes in foreign laws or regulatory requirements, including those with respect to environmental protection, export duties and quotas;

difficulty with staffing and managing widespread operations;

trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the price of our solar modules and make us less competitive in some countries; and

difficulty of and costs relating to compliance with the different commercial and legal requirements of the overseas markets in which we offer and sell our solar modules.

Our business in foreign markets requires us to respond to rapid changes in market conditions in these countries. Our overall success as a global business depends, in part, on our ability to succeed in differing legal, regulatory, economic, social and political conditions. We may not be able to develop and implement policies and strategies that will be effective in each location where we do business.

***Our future success depends on our ability to retain our key associates and to successfully integrate them into our management team.***

We are dependent on the services of Michael J. Ahearn, our Chief Executive Officer, Bruce Sohn, our President, Jens Meyerhoff, our Chief Financial Officer, John Carrington, our Executive Vice President Global Marketing and Business Development, John T. Gaffney, our Executive Vice President, and other members of our senior management team. The loss of Messrs. Ahearn, Sohn, Meyerhoff, Carrington, Gaffney, or any other member of our senior management team could have a material adverse effect on us. There is a risk that we will not be able to retain or replace these key associates. Several of our current key associates, including Messrs. Ahearn, Sohn, Meyerhoff, Carrington and Gaffney are subject to employment conditions or arrangements that contain post-employment non-competition provisions. However, these arrangements permit the associates to terminate their employment with us upon little or no notice.

***If we are unable to attract, train and retain key personnel, our business may be materially and adversely affected.***

Our future success depends, to a significant extent, on our ability to attract, train and retain management, operations and technical personnel. Recruiting and retaining capable personnel, particularly those with expertise in the photovoltaic industry and thin film technology, are vital to our success. There is substantial competition for qualified technical personnel and we cannot assure you that we will be able to attract or retain our technical personnel. If we are unable to attract and retain qualified associates, our business may be materially and adversely affected.

***Our failure to protect our intellectual property rights may undermine our competitive position and litigation to protect our intellectual property rights or defend against third-party allegations of infringement may be costly.***

Protection of our proprietary processes, methods and other technology, especially our proprietary vapor transport deposition process and laser scribing process, is critical to our business. Failure to protect and monitor the use of our existing intellectual property rights could result in the loss of valuable technologies. We rely primarily on patents,

trademarks, trade secrets, copyrights and other contractual restrictions to protect our intellectual property. As of December 27, 2008, we held 23 patents in the United States, which will expire at various times between 2009 and 2026, and had 37 patent applications pending. We also held 17 patents and had over 70 patent applications pending in foreign jurisdictions. Our existing patents and future patents could be challenged, invalidated, circumvented or rendered unenforceable. We have pending patent applications in the United States and in foreign jurisdictions. Our pending patent applications may not result in issued patents, or if patents are issued to us, such

## **Table of Contents**

patents may not be sufficient to provide meaningful protection against competitors or against competitive technologies.

We also rely upon unpatented proprietary manufacturing expertise, continuing technological innovation and other trade secrets to develop and maintain our competitive position. While we generally enter into confidentiality agreements with our associates and third parties to protect our intellectual property, such confidentiality agreements are limited in duration and could be breached and may not provide meaningful protection for our trade secrets or proprietary manufacturing expertise. Adequate remedies may not be available in the event of unauthorized use or disclosure of our trade secrets and manufacturing expertise. In addition, others may obtain knowledge of our trade secrets through independent development or legal means. The failure of our patents or confidentiality agreements to protect our processes, equipment, technology, trade secrets and proprietary manufacturing expertise, methods and compounds could have a material adverse effect on our business. In addition, effective patent, trademark, copyright and trade secret protection may be unavailable or limited in some foreign countries, especially any developing countries into which we may expand our operations. In some countries we have not applied for patent, trademark or copyright protection.

Third parties may infringe or misappropriate our proprietary technologies or other intellectual property rights, which could have a material adverse effect on our business, financial condition and operating results. Policing unauthorized use of proprietary technology can be difficult and expensive. Also, litigation may be necessary to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of the proprietary rights of others. We cannot assure you that the outcome of such potential litigation will be in our favor. Such litigation may be costly and may divert management attention and other resources away from our business. An adverse determination in any such litigation will impair our intellectual property rights and may harm our business, prospects and reputation. In addition, we have no insurance coverage against litigation costs and would have to bear all costs arising from such litigation to the extent we are unable to recover them from other parties.

***We may be exposed to infringement or misappropriation claims by third parties, which, if determined adversely to us, could cause us to pay significant damage awards or prohibit us from the manufacture and sale of our solar modules or the use of our technology.***

Our success depends largely on our ability to use and develop our technology and know-how without infringing or misappropriating the intellectual property rights of third parties. The validity and scope of claims relating to photovoltaic technology patents involve complex scientific, legal and factual considerations and analysis and, therefore, may be highly uncertain. We may be subject to litigation involving claims of patent infringement or violation of intellectual property rights of third parties. The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings to which we may become a party could subject us to significant liability to third parties, require us to seek licenses from third parties, which may not be available on reasonable terms, or at all, or pay ongoing royalties, require us to redesign our solar module, or subject us to injunctions prohibiting the manufacture and sale of our solar modules or the use of our technologies. Protracted litigation could also result in our customers or potential customers deferring or limiting their purchase or use of our solar modules until the resolution of such litigation.

***Currency translation and transaction risk may negatively affect our net sales, cost of sales and gross margins and could result in exchange losses.***

Although our reporting currency is the U.S. dollar, we conduct our business and incur costs in the local currency of most countries in which we operate. As a result, we are subject to currency translation and transaction risk. For

example, 95% and 98.8% of our net sales were outside the United States and denominated in euro for the fiscal years ended December 27, 2008 and December 29, 2007, respectively, and we expect a large percentage of our net sales to be outside the United States and denominated in foreign currencies in the future. In addition, with the expansion of our manufacturing operations into Germany and Malaysia, our operating expenses for the plants in these countries will be denominated in the local currency. Changes in exchange rates between foreign currencies and the U.S. dollar could affect our net sales and cost of sales and could result in exchange gains or losses. For

## **Table of Contents**

example, the strengthening euro contributed \$68.9 million to our net sales during fiscal 2008 compared with fiscal 2007. In addition, we incur currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a different currency from our reporting currency. For example, our Long Term Supply Contracts specify fixed pricing in euro through 2012 and do not adjust for changes in the U.S. dollar to euro exchange rate. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations.

We could also expand our business into emerging markets, many of which have an uncertain regulatory environment relating to currency policy. Conducting business in such emerging markets could cause our exposure to changes in exchange rates to increase.

***The Estate of John T. Walton and its affiliates have significant control over us and their interests may conflict with or differ from interests of other stockholder.***

Our current majority stockholder, the Estate of John T. Walton and its affiliates, including JCL Holdings, LLC, owned 40.6% of our outstanding common stock at December 27, 2008. As a result, the Estate of John T. Walton and its affiliates have substantial influence over all matters requiring stockholder approval, including the election of our directors and the approval of significant corporate transactions such as mergers, tender offers and the sale of all or substantially all of our assets. In addition, our amended and restated certificate of incorporation and by-laws provide that unless and until the Estate of John T. Walton, JCL Holdings, LLC, John T. Walton's surviving spouse, descendants, any entity (including a trust) that is for the benefit of John T. Walton's surviving spouse or descendants or any entity (including a trust) over which any of John T. Walton's surviving spouse, descendants or siblings has voting or dispositive power (collectively, the Estate) collectively owns less than 40% of our common stock then outstanding, stockholders holding 40% or more of our common stock then outstanding may call a special meeting of the stockholders, at which our stockholders could replace our board of directors. In addition, unless and until the Estate collectively owns less than 40% of our common stock then outstanding, stockholder action may be taken by written consent. The interests of the Estate could conflict with or differ from interests of other stockholders. For example, the concentration of ownership held by the Estate could delay, defer or prevent a change of control of our company or impede a merger, takeover or other business combination which a majority of stockholders may view favorably.

***If our goodwill or investment in related party becomes impaired we may be required to record a significant charge to earnings.***

We may be required to record a significant charge to earnings in our financial statements during the period in which any impairment of our goodwill or investment in a related party is determined, resulting in an impact on our results of operations.

Under accounting principles generally accepted in the United States of America, we review our amortizable intangible assets and investment in related party for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable include a decline in stock price and market capitalization, a decline in projections of future cash flows and slower growth rates in our industry. Goodwill recorded in connection with the acquisition of Turner Renewable Energy, LLC in November 2007 was \$33.4 million.

In October 2008, we made an equity investment in a company based in the United States that supplies solar power plants to commercial and residential customers at a total cost of \$25.0 million. This investment represents an ownership of approximately 12% of the voting interest in this company and is our only equity interest in that entity. Since our ownership interest in this company is less than 20% and we do not exercise significant influence over it, we

account for this investment using the cost method of accounting.

**Item 1B:** *Unresolved Staff Comments*

None.

**Table of Contents**

**Item 2: *Properties***

Our corporate headquarters is located in Tempe, Arizona and is leased pursuant to a non-cancellable operating lease that expires in August 2015. The total space occupied in this building is approximately 39,000 square feet. We also lease an additional 86,000 square feet of office space, in the aggregate, for administrative, business and marketing development, customer support and government affairs functions in the United States in New York, New York, Bridgewater, New Jersey, Perrysburg, Ohio, Denver, Colorado and Mountain View, California, and internationally in Berlin and Mainz, Germany, Brussels, Belgium, Paris, France, Madrid, Spain and Amsterdam, Netherlands. The expiration dates of these leases range between 2009 and 2018.

We own land and buildings at the sites of our manufacturing plants in Perrysburg, Ohio and Frankfurt/Oder, Germany, totaling 83 acres of land and approximately 850,000 square feet of buildings. We conduct research and development at the Ohio plant and in October 2008, we commenced construction of our Ohio plant expansion, which will include an additional production line and approximately 500,000 square feet of manufacturing, research and development and office space. On January 24, 2007, we entered into a land lease agreement for 44 acres in Kulim, Malaysia and on November 1, 2007 we exercised an option to lease an additional 40 acres on the adjacent land site. This non-cancellable operating lease expires in 2067. We own 2.0 million square feet of buildings on this land. We also lease approximately 130,000 square feet of warehouse and storage space near our manufacturing plants. The expiration dates of these leases range between 2009 and 2010; however, most of this space is rented on a month-to-month basis.

**Item 3: *Legal Proceedings***

***General***

In the ordinary conduct of our business, we are subject to periodic lawsuits, investigations and claims, including, but not limited to, routine employment matters. Although we cannot predict with certainty the ultimate resolution of lawsuits, investigations and claims asserted against us, we do not believe that any currently pending legal proceeding to which we are a party will have a material adverse effect on our business, results of operations, cash flows or financial condition.

**Item 4: *Submission of Matters to a Vote of Security Holders***

None.

**PART II**

**Item 5: *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

**Price Range of Common Stock**

Our common stock has been listed on The NASDAQ Global Select Market under the symbol FSLR since November 17, 2006. Prior to this time, there was no public market for our common stock. The following table sets



**Table of Contents**

forth the range of high and low sales prices per share as reported on The NASDAQ Global Select Market for the periods indicated.

|                         | <b>High</b> | <b>Low</b> |
|-------------------------|-------------|------------|
| <b>Fiscal Year 2008</b> |             |            |
| First Quarter           | \$ 273.73   | \$ 143.31  |
| Second Quarter          | 317.00      | 225.82     |
| Third Quarter           | 301.30      | 186.82     |
| Fourth Quarter          | 202.93      | 85.28      |
| <b>Fiscal Year 2007</b> |             |            |
| First Quarter           | \$ 59.88    | \$ 27.54   |
| Second Quarter          | 91.10       | 52.08      |
| Third Quarter           | 123.21      | 74.77      |
| Fourth Quarter          | 283.00      | 119.91     |

The closing sales price of our common stock on The NASDAQ Global Select Market was \$129.22 per share on February 18, 2009. As of February 18, 2009 there were 58 record holders of our common stock. This figure does not reflect the beneficial ownership of shares held in nominee names.

**Dividend Policy**

We have never paid, and it is our present intention for the foreseeable future not to pay, dividends on our common stock. The declaration and payment of dividends is subject to the discretion of our board of directors and depends on various factors, including our net income, financial condition, cash requirements, future prospects and other factors deemed relevant by our board of directors.

**Equity Compensation Plans**

The following table sets forth certain information, as of December 27, 2008, concerning securities authorized for issuance under all equity compensation plans of our company:

| <b>Plan Category</b>                                       | <b>Number of Securities to be Issued Upon Exercise of Outstanding Options and Rights(a)(1)</b> | <b>Weighted-Average Price of Outstanding Options and Rights(b)(2)</b> | <b>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))(c)</b> |
|--|--|---|--|
| Equity compensation plans approved by our stockholders(3)  | 2,186,564  | \$ 39.63  | 5,291,725  |
| Equity compensation plans not approved by our stockholders |  |   |  |

|       |           |    |       |           |
|-------|-----------|----|-------|-----------|
| Total | 2,186,564 | \$ | 39.63 | 5,291,725 |
|-------|-----------|----|-------|-----------|

- (1) Includes 650,254 shares issuable upon vesting of RSUs granted under the 2006 Omnibus Incentive Compensation Plan. The remaining balance consists of outstanding stock option grants.
- (2) The weighted average exercise price does not take into account the shares issuable upon vesting of outstanding RSUs, which have no exercise price.
- (3) Includes our 2003 Unit Option Plan and 2006 Omnibus Incentive Compensation Plan.

**Table of Contents****Stock Price Performance Graph**

The following graph compares the cumulative 25-month total return on our common stock with the cumulative total returns of the S&P 500 index, the Russell 2000 index and the NASDAQ Clean Edge U.S. Liquid Series index. An investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our common stock and in each index on November 17, 2006 and its relative performance is tracked through December 27, 2008. No cash dividends have been declared on shares of our common stock. This performance graph is not soliciting material, is not deemed filed with the SEC and is not to be incorporated by reference in any filing by us under the Securities Act of 1933, as amended (the Securities Act), or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing. The stock price performance shown on the graph represents past performance and should not be considered an indication of future price performance.

**COMPARISON OF 25 MONTH CUMULATIVE TOTAL RETURN\***

Among First Solar, Inc., The S&P 500 Index,  
The Russell 2000 Index and The NASDAQ Clean Edge U.S. Liquid Series Index

\*\$100 invested on November 17, 2006 in stock and November 30, 2006 in index, including reinvestment of dividends.  
Fiscal year ending December 27, 2008

Copyright© 2009 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

|      | <b>Nov.<br/>2006</b> | <b>Dec.<br/>2006</b> | <b>Mar.<br/>2007</b> | <b>Jun.<br/>2007</b> | <b>Sep.<br/>2007</b> | <b>Dec. 2007</b> | <b>Mar.<br/>2008</b> | <b>Jun. 2008</b> | <b>Sep.<br/>2008</b> |
|------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|----------------------|------------------|----------------------|
| ar,  | 100.00               | 120.61               | 210.23               | 360.91               | 475.91               | 1079.79          | 934.28               | 1102.75          | 763.58               |
| 0    | 100.00               | 101.40               | 102.05               | 108.46               | 110.66               | 106.97           | 96.87                | 94.23            | 86.34                |
| 2000 | 100.00               | 100.33               | 102.29               | 106.80               | 103.50               | 98.76            | 88.99                | 89.51            | 88.51                |
| Q    |                      |                      |                      |                      |                      |                  |                      |                  |                      |
| Edge |                      |                      |                      |                      |                      |                  |                      |                  |                      |
| uid  | 100.00               | 98.85                | 115.27               | 132.13               | 149.01               | 199.01           | 143.60               | 153.91           | 117.53               |

*The stock price performance included in this graph is not necessarily indicative of future stock price performance.*

**Table of Contents****Recent Sales of Unregistered Securities**

During 2007, we sold unregistered securities to a limited number of persons, as described below. None of these transactions involved any underwriters or any public offerings and we believe that each of these transactions was exempt from registration requirements. The recipients of the securities in these transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the share certificates and instruments issued in these transactions.

On November 30, 2007, we acquired 100% of the outstanding membership interests of Turner Renewable Energy, LLC ( TRE ). In connection with this acquisition, we issued 118,346 unregistered shares of our common stock to the members of TRE in satisfaction of a portion of the total purchase price of \$34.3 million (excluding exit and transaction costs of \$0.7 million), of which \$6.3 million was paid in cash. The issuance of our shares was made in reliance upon an exemption from the registration requirements of the Securities Act of 1933 provided by Regulation D. The members who received shares made representations to us as to their accredited investor status and as to their investment intent and financial sophistication. The shares are subject to certain restrictions on transfer, including a restriction on transfer absent compliance with Regulation D or other available exemption from our registration under the Securities Act.

**Purchases of Equity Securities by the Issuer and Affiliate Purchases**

None.

**Item 6: Selected Consolidated Financial Data**

The following table sets forth our selected consolidated financial data for the periods and at the dates indicated.

The selected consolidated financial information for the fiscal years ended December 27, 2008, December 29, 2007, December 30, 2006 have been derived from the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data for the fiscal year ended December 31, 2005 and December 25, 2004 has been derived from audited consolidated financial statements not included in this Annual Report on Form 10-K. The information presented below should be read in conjunction with Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes.

|                                     | <b>Years Ended</b>                              |                         |                         |                         |                         |
|-------------------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|
|                                     | <b>Dec 27,<br/>2008</b>                         | <b>Dec 29,<br/>2007</b> | <b>Dec 30,<br/>2006</b> | <b>Dec 31,<br/>2005</b> | <b>Dec 25,<br/>2004</b> |
|                                     | <b>(In thousands, except per share amounts)</b> |                         |                         |                         |                         |
| <b>Statement of Operations:</b>     |   |                         |                         |                         |                         |
| Net sales                           | \$ 1,246,301                                    | \$ 503,976              | \$ 134,974              | \$ 48,063               | \$ 13,522               |
| Cost of sales                       | 567,908   | 252,573                 | 80,730                  | 31,483                  | 18,851                  |
| Gross profit (loss)                 | 678,393   | 251,403                 | 54,244                  | 16,580                  | (5,329)                 |
| Research and development            | 33,517  | 15,107                  | 6,361                   | 2,372                   | 1,240                   |
| Selling, general and administrative | 174,039   | 82,248                  | 33,348                  | 15,825                  | 9,312                   |
| Production start-up                 | 32,498  | 16,867                  | 11,725                  | 3,173                   | 900                     |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|   |         |         |         |         |          |
|---|---------|---------|---------|---------|----------|
| Operating income (loss)   | 438,339 | 137,181 | 2,810   | (4,790) | (16,781) |
| Foreign currency gain (loss)  | 5,722   | 1,881   | 5,544   | (1,715) | 116      |
| Interest income   | 21,158  | 20,413  | 2,648   | 316     | 131      |
| Interest expense, net   | (509)   | (2,294) | (1,023) | (418)   | (100)    |
| Other (expense) income  | (934)   | (1,219) | (799)   | 56      | (137)    |
| Income tax expense (benefit)  | 115,446 | (2,392) | 5,206   |         |          |
| Income (loss) before cumulative effect of<br>change in accounting principle | 348,330 | 158,354 | 3,974   | (6,551) | (16,771) |
| Cumulative effect of change in<br>accounting for share-based compensation   |         |         |         | 89      |          |

**Table of Contents**

|  | <b>Years Ended</b>                              |                         |                         |                         |                         |
|--|---|-------------------------|-------------------------|-------------------------|-------------------------|
|  | <b>Dec 27,<br/>2008</b>                         | <b>Dec 29,<br/>2007</b> | <b>Dec 30,<br/>2006</b> | <b>Dec 31,<br/>2005</b> | <b>Dec 25,<br/>2004</b> |
|  | <b>(In thousands, except per share amounts)</b> |                         |                         |                         |                         |
| Net income (loss)                        | \$ 348,330                                      | \$ 158,354              | \$ 3,974                | \$ (6,462)              | \$ (16,771)             |
| <b>Net income (loss) per share data:</b> |   |                         |                         |                         |                         |
| Basic net income (loss) per share:       |   |                         |                         |                         |                         |
| Net income (loss) per share              | \$ 4.34   | \$ 2.12                 | \$ 0.07                 | \$ (0.13)               | \$ (0.39)               |
| Weighted average shares                  | 80,178  | 74,701                  | 56,310                  | 48,846                  | 43,198                  |
| Diluted net income (loss) per share:     |   |                         |                         |                         |                         |
| Net income (loss) per share              | \$ 4.24   | \$ 2.03                 | \$ 0.07                 | \$ (0.13)               | \$ (0.39)               |
| Weighted average shares                  | 82,124  | 77,971                  | 58,255                  | 48,846                  | 43,198                  |

|   | <b>Years Ended</b>      |                         |                         |                         |                         |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|   | <b>Dec 27,<br/>2008</b> | <b>Dec 29,<br/>2007</b> | <b>Dec 30,<br/>2006</b> | <b>Dec 31,<br/>2005</b> | <b>Dec 25,<br/>2004</b> |
|   | <b>(In thousands)</b>   |                         |                         |                         |                         |
| <b>Cash Flow Data:</b>                    |                         |                         |                         |                         |                         |
| Net cash provided by (used in)            |                         |                         |                         |                         |                         |
| operating activities                      | \$ 463,067              | \$ 205,951              | \$ (576)                | \$ 5,040                | \$ (15,185)             |
| Net cash used in investing activities     | (308,441)               | (547,250)               | (159,994)               | (43,832)                | (7,790)                 |
| Net cash provided by financing activities | 177,549                 | 430,421                 | 451,550                 | 51,663                  | 22,900                  |

|                                    | <b>Years Ended</b>      |                         |                         |                         |                         |
|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                    | <b>Dec 27,<br/>2008</b> | <b>Dec 29,<br/>2007</b> | <b>Dec 30,<br/>2006</b> | <b>Dec 31,<br/>2005</b> | <b>Dec 25,<br/>2004</b> |
|                                    | <b>(In thousands)</b>   |                         |                         |                         |                         |
| <b>Balance Sheet Data:</b>         |                         |                         |                         |                         |                         |
| Cash and cash equivalents          | \$ 716,218              | \$ 404,264              | \$ 308,092              | \$ 16,721               | \$ 3,465                |
| Marketable securities              | 105,601                 | 265,399                 | 323                     | 312                     | 306                     |
| Accounts receivable, net           | 61,703                  | 18,165                  | 27,123                  | 882                     | 4,125                   |
| Inventories                        | 121,554                 | 40,204                  | 16,510                  | 6,917                   | 3,686                   |
| Property, plant and equipment, net | 842,622                 | 430,104                 | 178,868                 | 73,778                  | 29,277                  |
| Total assets                       | 2,114,502               | 1,371,312               | 578,510                 | 101,884                 | 41,765                  |
| Current debt                       | 34,951                  | 39,309                  | 19,650                  | 20,142                  |                         |
| Long-term debt                     | 163,519                 | 68,856                  | 61,047                  | 28,581                  | 13,700                  |
|                                    | 35,238                  | 13,079                  | 3,724                   | 917                     |                         |

Accrued collection and recycling liabilities

|                           |           |           |         |        |        |
|---------------------------|-----------|-----------|---------|--------|--------|
| Total liabilities         | 601,460   | 274,045   | 116,844 | 63,490 | 19,124 |
| Total stockholders equity | 1,513,042 | 1,097,267 | 411,440 | 13,129 | 22,641 |

**Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations**

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical consolidated financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties, and assumptions as described under the Note Regarding Forward-Looking Statements, that appears earlier in this Annual Report on Form 10-K. Our actual results could differ materially from those anticipated by these forward-looking statements as a result of many factors, including those discussed under Item 1A: Risk Factors and elsewhere in this Annual Report on Form 10-K.*

## **Table of Contents**

### **Overview**

We design and manufacture solar modules using a proprietary thin film semiconductor technology that has allowed us to reduce our average solar module manufacturing costs to among the lowest in the world. Each solar module uses a thin layer of cadmium telluride semiconductor material to convert sunlight into electricity. We manufacture our solar modules on high-throughput production lines and we perform all manufacturing steps ourselves in an automated, proprietary, continuous process. During 2006, 2007 and 2008, we sold most of our solar modules to solar power system developers, system integrators and operators headquartered in Germany, France and Spain.

Currently, we manufacture our solar modules at our Perrysburg, Ohio, Frankfurt/Oder, Germany and Kulim, Malaysia manufacturing facilities and conduct our research and development activities at our Perrysburg, Ohio manufacturing facility. Our average manufacturing cost per watt has decreased from \$2.94 during 2004 to \$1.08 during 2008. We define average manufacturing cost per watt as the total manufacturing cost incurred during a period divided by the total watts produced during that period. By continuing to expand production globally and improve our technology and manufacturing process, we believe that we can further reduce our manufacturing costs per watt.

We were founded in 1999 to bring an advanced thin film semiconductor process into commercial production through the acquisition of predecessor technologies and the initiation of a research, development and production program that allowed us to improve upon the predecessor technologies and launch commercial operations in January 2002.

On February 22, 2006, we were incorporated as a Delaware corporation. Prior to that date, we operated as a Delaware limited liability company.

On November 30, 2007, we completed the acquisition of Turner Renewable Energy, LLC, a privately held company which designed and deployed commercial solar projects for utilities and Fortune 500 companies in the United States. We have integrated the operations from this acquisition into our solar power systems and project development business. This business sells solar power systems directly to system owners. These systems include both our solar modules and balance of system components that we procure from third parties. We also sell integrated services related to the development of commercial solar projects in the United States, such as the system design, engineering, procurement of permits and balance of system components, construction management, monitoring and maintenance as part of a system solution delivery. This acquisition has created a platform for our systems business in North America to deliver solar electricity solutions to utility companies. The total consideration for the transaction was \$34.3 million (excluding exit and transaction costs of \$0.7 million); consisting of \$28.0 million in common stock and \$6.3 million in cash (see Note 5 to our consolidated financial statements).

Our fiscal year ends on the Saturday on or before December 31. All references to fiscal year 2008 relate to the 52 weeks ended December 27, 2008; all references to fiscal year 2007 relate to the 52 weeks ended December 29, 2007; and all references to fiscal year 2006 relate to the 52 weeks ended December 30, 2006. We use a 13 week fiscal quarter.

### ***Manufacturing Capacity***

As of December 27, 2008 we operated 19 production lines at our plants in Perrysburg, Ohio, Frankfurt/Oder, Germany and Kulim, Malaysia. After completion of plant four at our Malaysian manufacturing center and the expansion of our Perrysburg, Ohio plant we will have 24 production lines with an annual global manufacturing capacity of approximately 1145 MW (based on the fourth quarter of 2008 run rate at our existing plants).

### **Financial Operations Overview**



The following describes certain line items in our statement of operations and some of the factors that affect our operating results.

## **Table of Contents**

### *Net Sales*

We generate substantially all of our net sales from the sale of solar modules. We price and sell our solar modules per watt of power. As a result, our net sales can fluctuate based on our output of sellable watts or price. We currently sell almost all of our solar modules to solar power system project developers, system integrators and operators headquartered in Germany, France and Spain, which either resell our solar modules to end-users or integrate them into power plants that they own or operate or sell.

The solar industry has been moving from a supply driven to a demand driven industry, with increasing competitive pressure as the supply of solar modules exceeds current demand. Our customers face significant challenges under the current economic conditions, including an increase in interest or lending rates or tightening of the supply of capital to finance solar projects. Our net sales could be adversely impacted if legislation reduces the current subsidy programs in Europe, North America or Asia or if interest rates increase or financing is no longer available, which could impact our end-users' ability to either meet their target return on investment or finance their projects. In addition, subsidies for our customers, particularly in Germany, are declining at a rate that is greater than the annual contractual price decline we extend under our Long Term Supply Contracts. As result, we may be less competitive and not meet our customers internal rate of return (IRR) or the profit margin of our customers might decline, which could lower demand for our solar panels.

Our sales prices under the Long Term Supply Contracts are denominated in euro, exposing us to risks from currency exchange rate fluctuations. Approximately 95% of our sales are denominated in euro and subject to fluctuation in the exchange rate between the euro and U.S. dollar. For example, the strengthening of the euro during 2008 increased our net sales by 6% in fiscal 2008 compared to fiscal 2007.

In April 2006, we entered into long-term contracts for the purchase and sale of our solar modules with six European solar power system project developers and system integrators, and in 2007, we entered into additional long-term contracts for the purchase and sale of our solar modules with six other European project developers that also own and operate renewable energy projects. In 2008, we entered into long-term contracts with three European project developers, system integrators and operators and increased our contracted volume with four customers. We also entered into a five-year agreement with a solar power system project developer and system integrator in the United States, which is a related party. These contracts account for a significant portion of our planned production over the period from 2009 through 2013, and therefore, will significantly affect our overall financial performance.

Our Long Term Supply Contracts entered into in 2006 require us to deliver solar modules each year that, in total, meet or exceed a specified minimum average number of watts per module for the year. Under these Long Term Supply Contracts, we are required to increase the minimum average number of watts per module by approximately 5% annually from 2008 to 2009 and then by 3% for modules delivered in 2012. If we are unable to meet the minimum average annual number of watts per module in a given year, we will be in breach of the applicable agreements, entitling our customers to certain remedies, potentially including the right to terminate their Long Term Supply Contracts. Our Long Term Supply Contracts entered into in 2007 do not require a minimum average number of watts per module but provide for a base number of watts per module that increases 3-4% annually from 2008 to 2010/2011, and then remains fixed through 2012, and contain a price adjustment per watt if the watts delivered per module are higher or lower than the base number of watts per module. As of December 27, 2008, all of our Long Term Supply Contracts specify a sales price per watt that declines by approximately 6.5% at the beginning of each year through the expiration date of the contracts in 2012. Because the sales prices under our Long Term Supply Contracts are fixed and have the built-in decline each year, we cannot pass along any increases in manufacturing costs to these customers. Although we believe that our total manufacturing costs per watt will decline at the same rate or more rapidly than our prices under the Long Term Supply Contracts, our failure to achieve our manufacturing cost per watt targets could result in a reduction of our gross profit.

Our Long Term Supply Contracts in the aggregate allow for approximately \$5.8 billion (4.9 billion denominated in euro at an assumed exchange rate of \$1.15/ 1.00 and 0.2 billion denominated in USD) in sales from 2009 to 2013. During 2008, we amended a Long Term Supply Contract with one customer, which reduced the volume of solar modules delivered to such customer in 2008 and also reduced the volume of solar modules to be delivered over the remaining term of the agreement to such customer. During February 2009 we amended our Long Term Supply Contracts with two customers to accelerate the decline in the sales price per watt under such contracts in 2009 and

## **Table of Contents**

2010 in exchange for increases in the volume of solar modules to be delivered under such contracts. We are currently in discussions with several other customers about making similar amendments to their Long Term Supply Contracts.

The annual decline in the sales price under our Long Term Supply Contracts will reduce our net sales by approximately 5-6% each year, assuming that the rated power of our solar modules remains flat, and will impact our cash flow accordingly. As a result, our profitability could decline if we are unable to reduce our manufacturing cost per watt by at least the same rate as the contractual sales prices decrease.

Under our customer contracts, starting in April 2006, we transfer title and risk of loss to the customer and recognize revenue upon shipment. Under our customer contracts in effect prior to April 1, 2006, we did not transfer title or risk of loss, or recognize revenue, until the solar modules were received by our customers. Our customers do not have extended payment terms or rights of return under these contracts.

We have the right to terminate certain Long Term Supply Contracts upon 12 months notice and the payment of a termination fee if we determine that certain material adverse changes have occurred, including, depending on the contract one or more of the following: new laws, rules or regulations with respect to our production, distribution, installation or collection and recycling program have a substantial adverse impact on our business; unanticipated technical or operational issues result in our experiencing widespread, persistent quality problems or the inability to achieve stable conversion efficiencies at planned levels; or extraordinary events beyond our control substantially increase the cost of our labor, materials or utility expenses or significantly reduce our throughput. The average termination fee under those agreements is \$4.2 million ranging from \$0.7 million to \$8.0 million.

Our customers are entitled to certain remedies in the event of missed deliveries of kilowatt volume. These delivery commitments are established through rolling four quarter forecasts that are agreed to with each of the customers within the parameters established in the Long Term Supply Contracts and define the specific quantities to be purchased on a quarterly basis and the schedules of the individual shipments to be made to the customers. In the case of a late delivery, certain of our customers are entitled to a maximum charge representing a percentage of the delinquent revenue. If we do not meet our annual minimum volume shipments, our customers also have the right to terminate these contracts on a prospective basis.

With our acquisition of Turner Renewable Energy, LLC on November 30, 2007, we began accounting for a portion of our revenues using the percent of completion method of accounting. Revenues for our solar power systems and project development business for the years ended December 27, 2008 and December 29, 2007 were \$53.7 million and \$3.7 million, respectively, and were not material to our consolidated results of operations.

During 2008, our principal customers were Blitzstrom GmbH, Colexon Energy AG (previously Reinecke + Pohl), Conergy AG, Juwi Solar GmbH and Phoenix Solar AG. During 2008, each of these five customers individually accounted for between 11% and 19% of our net sales. All of our other customers individually accounted for less than 10% of our net sales during 2008.

### ***Cost of sales***

Our cost of sales includes the cost of raw materials and components, such as tempered back glass, transparent conductive oxide (TCO) coated front glass, cadmium telluride, laminate, connector assemblies, laminate edge seal and others. Other items contributing to our cost of sales are direct labor and manufacturing overhead such as engineering expense, equipment maintenance, environmental health and safety expenses, quality and production control and procurement. Cost of sales also includes depreciation of manufacturing plants and equipment and facility-related expenses. In addition, we accrue warranty and solar module end-of-life collection and recycling costs to our cost of sales.

We implemented a program in 2005 to collect and recycle our solar modules after their use. Under our collection and recycling program, we enter into an agreement with the end-users of the solar power systems that use our solar modules. In the agreement, we commit, at our expense, to remove the solar modules from the installation site at the end of their life and transport them to a processing center where the solar module materials and components will be either refurbished and resold as used panels or recycled to recover some of the raw materials. In return, the owner agrees not to dispose of the solar modules except through our end-of-life collection and recycling

## **Table of Contents**

program or another program that we approve of, and the solar power system owner is responsible for disassembling the solar modules and packaging them in containers that we provide. At the time we sell a solar module, we record an expense in cost of sales equal to the fair value of the estimated future end-of-life collection and recycling obligation. We subsequently record accretion expense on this future obligation, which we classify with selling, general and administrative expense.

Overall, we expect our cost of sales per watt to decrease over the next several years due to an increase of sellable watts per solar module, an increase in unit output per line, geographic diversification into lower-cost manufacturing regions and more efficient absorption of fixed costs driven by economies of scale.

Deferred project costs represent uninstalled materials we have procured for customer projects. We recognize these costs as deferred assets until we install the materials. Deferred project costs were \$0.7 million at December 27, 2008.

### ***Gross profit***

Gross profit is affected by numerous factors, including our average selling prices, foreign exchange rates, our manufacturing costs and the effective utilization of our production facilities. For example, our Long Term Supply Contracts specify a sales price per watt that declines 6.5% at the beginning of each year. Another factor impacting gross profits is the ramp of production on new plants due to a reduced ability to absorb fixed costs until full production volumes are reached. As a result, gross profits may vary from quarter to quarter and year to year.

### ***Research and development***

Research and development expense consists primarily of salaries and personnel-related costs and the cost of products, materials and outside services used in our process and product research and development activities. We continually add equipment for general use in further process developments and record the depreciation of this equipment as research and development expense. We may also allocate a portion of the annual operating cost of the Ohio expansion to research and development expense.

We maintain a number of programs and activities to improve our technology in order to enhance the performance of our solar modules and of our manufacturing processes. We maintain active collaborations with the National Renewable Energy Laboratory (a division of the United States Department of Energy), Brookhaven National Laboratory and several universities. We report our research and development expense net of grant funding. During the past four years, we received grant funding that we applied towards our research and development programs. We received \$0.9 million, \$1.8 million and \$0.9 million during the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively. We expect our research and development expense to increase in absolute terms in the future as we increase personnel and research and development activity. Over time, we expect research and development expense to decline as a percentage of net sales and on a cost per watt basis as a result of economies of scale.

### ***Selling, general and administrative***

Selling, general and administrative expense consists primarily of salaries and other personnel-related costs, professional fees, insurance costs, travel expense and other selling expenses. We expect these expenses to increase in the near term, both in absolute dollars and as a percentage of net sales, in order to support the growth of our business as we expand our sales and marketing efforts, improve our information processes and systems and implement the financial reporting, compliance and other infrastructure required for a public company. Over time, we expect selling, general and administrative expense to decline as a percentage of net sales and on a cost per watt basis as our net sales and our total watts produced increase.

***Production start-up***

Production start-up expense consists primarily of salaries and personnel-related costs and the cost of operating a production line before it has been qualified for full production, including the cost of raw materials for solar modules run through the production line during the qualification phase. It also includes all expenses related to the

## **Table of Contents**

selection of a new site and the related legal and regulatory costs and the costs to maintain our plant replication program, to the extent we cannot capitalize these expenditures. Production start-up expenses during 2006 were \$11.7 million due to the qualification of our Ohio expansion and the planning and preparation for operation of our German plant. We incurred production start-up expense of \$16.9 million during 2007 in connection with the qualification of the German plant and the planning and preparation of our plants at our Malaysian manufacturing center. Production start-up expense during 2008 was \$32.5 million relating to the planning and preparation of our plants at the Malaysian manufacturing center. In general, we expect production start-up expense per production line to be higher when we build an entirely new manufacturing facility compared with the addition of new production lines at an existing manufacturing facility, primarily due to the additional infrastructure investment required when building an entirely new facility. We also expect to incur production start-up expenses during 2009 related to our expansion of our Perrysburg, Ohio manufacturing facility and plant four at the Malaysian manufacturing center. Over time, we expect production start-up expense to decline as a percentage of net sales and on a cost per watt basis as a result of economies of scale.

### ***Interest income***

Interest income is earned on our cash, cash equivalents, marketable securities and restricted cash.

### ***Interest expense, net***

Interest expense, net of amounts capitalized, is incurred on various debt financings.

### ***Foreign currency gain (loss)***

Foreign currency gain (loss) consists of gains and losses resulting from holding assets and liabilities and conducting transactions denominated in currencies other than our functional currencies.

## **Critical Accounting Policies and Estimates**

In preparing our financial statements in conformity with generally accepted accounting principles in the United States (GAAP), we make estimates and assumptions about future events that affect the amounts of reported assets, liabilities, revenues and expenses, as well as the disclosure of contingent liabilities in our financial statements and the related notes thereto. Some of our accounting policies require the application of significant judgment by management in the selection of appropriate assumptions for determining these estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. As a result, we cannot assure you that actual results will not differ significantly from estimated results. We base our judgments and estimates on our historical experience, on our forecasts and on other available information, as appropriate. Our significant accounting policies are further described in Note 2 to our consolidated financial statements for the year ended December 27, 2008 included elsewhere in this Annual Report on Form 10-K.

Our critical accounting policies and estimates, which require the most significant management estimates and judgment in determining amounts reported in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K are as follows:

*Revenue recognition.* We sell our products directly to solar power system integrators and operators and recognize revenue when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss has passed to the customer, the sales price is fixed or determinable and collectability of the resulting receivable is reasonably assured. This policy is in accordance with the requirements of SEC Staff Accounting Bulletin No. (SAB) 101, *Revenue Recognition in Financial Statements*, as amended by SAB 104, *Revision of Topic 13 (Revenue*



*Recognition*). Under this policy, we record a trade receivable for the selling price of our product and reduce inventory for the cost of goods sold when delivery occurs in accordance with the terms of the sales contract. We do not offer extended payment terms or rights of return for our sold products.

With our acquisition of Turner Renewable Energy, LLC on November 30, 2007, a portion of our revenues will be derived from long-term contracts that we account for under the provisions of the American Institute of Certified Public Accountants' Statement of Position No. (SOP) 81-1, *Accounting for Performance of Construction-Type and*

**Table of Contents**

*Certain Production-Type Contracts.* Accordingly, we recognize revenue on long-term fixed-price contracts on the percentage of completion basis using the ratio of costs incurred to estimated total costs at completion as the measurement basis for progress toward completion and revenue recognition. If we identify any losses on contracts, we will recognize those losses immediately. Contract accounting requires significant judgment in assessing risks, estimating contract costs and making related assumptions for schedule and technical issues. Furthermore, contract change orders, claims and similar items, require us to use judgment in estimating related amounts and assessing the potential for realization. We only include contract change orders, claims and similar items in contract value when we can reliably estimate their amounts and can conclude that their realization is probable.

Incurred costs include all direct material, labor, subcontractor cost, and those indirect costs related to contract performance, such as indirect labor, supplies and tools. We recognize job material costs as incurred costs when the job materials have been installed. When contracts specify that title to job materials transfers to the customer before installation has been performed, we defer revenue and recognize it upon installation, using the percentage-of-completion method of accounting. We consider job materials to be installed materials when they are permanently attached or fitted to the solar power systems as required by the engineering design.

Our liability for billings in excess of costs and estimated earnings, which is part of the balance sheet caption Other current liabilities, was \$2.2 million and \$2.1 million as of December 27, 2008 and December 29, 2007, respectively. This liability represents our billings in excess of revenues recognized on our contracts, which results from differences between contractual billing schedules and the timing of revenue recognition under our revenue recognition accounting policies.

We also have a limited number of revenue arrangements that include multiple deliverables. These are contracts under which we provide design and consulting services for and we supply parts and equipment for solar power systems. We follow the guidance in Emerging Issues Task Force Issue No. (EITF) 00-21, *Revenue Arrangements with Multiple Deliverables*, in order to determine whether these arrangements have more than one unit of accounting. According to EITF 00-21, deliverable elements in a revenue arrangement with multiple deliverables are separate units of accounting if the elements have standalone value to the customer, if objective and reliable evidence of the fair value of undelivered elements is available, and if the arrangement does not include a general right of return related to delivered items. We determined that our design and supply arrangements generally consist of two elements that qualify as separate units of accounting the provision of design and consulting services and the supply of solar power system parts and equipment. We apply the same revenue recognition principles (from SAB 104) as we use for our arrangements for the stand-alone sales of products to the recognition of revenue on the parts and equipment unit of accounting of our multiple deliverable arrangements. We recognize revenue from the design and consulting services unit of accounting using the percentage of completion method in accordance with SOP 81-1.

*End of life collection and recycling.* At the time of sale, we recognize an expense for the estimated fair value of our future obligation for collecting and recycling the solar modules that we have sold. We base our estimate of the fair value of our collection and recycling obligations on the present value of the expected future cost of collecting and recycling the solar modules, which includes the cost of packaging the solar modules for transport, the cost of freight from the solar module's installation site to a recycling center, the material, labor and capital costs of the recycling process and an estimated third-party profit margin and return on risk for collection and recycling services. We base this estimate on our experience collecting and recycling our solar modules and on our expectations about future developments in recycling technologies and processes and about economic conditions at the time the solar modules will be collected and recycled. In the periods between the time of our sales and our settlement of the collection and recycling obligations, we accrete the carrying amount of the associated liability by applying the discount rate used for its initial measurement. At December 27, 2008, our estimate of the fair value of our liability for collecting and recycling solar modules was \$35.2 million. A 10 percent decrease in our estimate of the future cost of collecting and recycling a solar module would reduce this estimated liability by \$3.5 million, to \$31.7 million; a 10 percent increase

in our estimate of the future cost of collecting and recycling a solar module would increase this estimated liability by \$3.5 million, to \$38.7 million.

*Product warranties.* We provide a limited warranty for defects in materials and workmanship under normal use and service conditions for five years following delivery to the owner of our solar modules. We also warrant to the

**Table of Contents**

owner of our solar modules that solar modules installed in accordance with agreed-upon specifications will produce at least 90% of their initial power output rating during the first 10 years following their installation and at least 80% of their initial power output rating during the following 15 years. Our warranties are automatically transferred from the original purchaser of our solar modules to a subsequent purchaser. We accrue warranty costs when we recognize sales, using amounts estimated based on our historical experience with warranty claims, our monitoring of field installation sites and in-house testing. During the years ended December 30, 2006, December 29, 2007 and December 27, 2008, our estimate of our product warranty liability did not require significant adjustments.

*Share-based compensation.* In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. (SFAS) 123(R), *Share-Based Payment*, which requires companies to recognize compensation expense for all share-based payments to employees, including grants of employee stock options, in their statements of operations based on the fair value of the awards on their grant dates. We adopted SFAS 123(R) during the first quarter of the year ended December 31, 2005 using the modified retrospective method of transition. In March 2005, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. (SAB) 107, which provides guidance regarding the implementation of SFAS 123(R). In particular, SAB 107 provides guidance regarding calculating assumptions used in share-based compensation valuation models, the classification of share-based compensation expense, the capitalization of share-based compensation costs and disclosures in management's discussion and analysis in filings with the SEC.

Determining the appropriate fair-value model and calculating the fair value of share-based awards at the date of grant using that valuation model requires judgment. We use the Black-Scholes-Merton valuation formula to estimate the fair value of employee stock options, which is consistent with the provisions of SFAS No. 123(R). Option pricing models, including the Black-Scholes-Merton formula, require the use of input assumptions, including expected volatility, expected term, expected dividend rate and expected risk-free rate of return. Because our stock has only recently become publicly traded, we do not have a meaningful observable share-price volatility; therefore, we estimate our expected volatility based on that of similar publicly-traded companies and expect to continue to do so until such time as we might have adequate historical data to refer to from our own traded share price. We estimated our options expected terms using our best estimate of the period of time from the grant date that we expect the options to remain outstanding. If we determine another method to estimate expected volatility or expected term is more reasonable than our current methods, or if another method for calculating these input assumptions is prescribed by authoritative guidance, the fair value calculated for future share-based awards could change significantly from those used for past awards, even if the critical terms of the awards are similar. Higher volatility and expected terms result in an increase to share-based compensation determined at the date of grant. The expected dividend rate and expected risk-free rate of return are not as significant to the calculation of fair value.

In addition, SFAS No. 123(R) requires us to develop an estimate of the number of share-based awards which we expect to vest. Quarterly changes in our estimates of award forfeiture rates and further adjustments when the awards actually vest can have a significant effect on reported share-based compensation. Increases to the estimated forfeiture rate will result in a decrease to the expense recognized in the financial statements during the quarter of the change and future quarters. Decreases in the estimated forfeiture rate will result in an increase to the expense recognized in the financial statements during the quarter of the change and future quarters. These adjustments affect our cost of sales, research and development expenses, selling, general and administrative and production start-up expenses. The adjustments to our estimates of the number of share-based awards that we expect to vest and further adjustments as certain awards completed their vesting period reduced our share-based compensation expense by \$0.6 million in the year ended December 30, 2006 and increased our share-based compensation expense by \$2.9 million and \$0.9 million in the years ended December 29, 2007 and December 27, 2008, respectively. The expense we recognize in future periods could differ significantly from the current period and/or our forecasts due to adjustments in the estimated number of share-based awards that we expect to vest and further adjustments when the awards actually vest.

*Valuation of Long-Lived Assets.* Our long-lived assets include manufacturing equipment and facilities. Our business requires significant investment in manufacturing facilities that are technologically advanced but that may become obsolete through changes in our industry or the fluctuations in demand for our solar modules. We account for any impairment of our long-lived tangible assets and definite-lived intangible assets in accordance with SFAS 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. As a result, we assess long-lived assets

## **Table of Contents**

classified as held and used, including our property, plant and equipment, for impairment whenever events or changes in business circumstances arise that may indicate that the carrying amount of the long-lived assets may not be recoverable. These events would include significant current period operating or cash flow losses combined with a history of such losses, significant changes in the manner of use of assets and significant negative industry or economic trends. We evaluated our long-lived assets for impairment during the years ended December 27, 2008 and December 29, 2007 and did not note any events or changes in circumstances indicating that the carrying values of material long-lived assets are not recoverable.

*Accounting for Income Taxes.* We are subject to the income tax laws of the United States, its states and municipalities and those of the foreign jurisdictions in which we have significant business operations. These tax laws are complex and subject to different interpretations by the taxpayer and the relevant governmental taxing authorities. We must make judgments and interpretations about the application of these inherently complex tax laws when determining our provision for income taxes and must also make estimates about when in the future certain items affect taxable income in the various tax jurisdictions. Disputes over interpretations of the tax laws may be settled with the taxing authority upon examination or audit. We regularly assess the likelihood of assessments in each of the taxing jurisdictions resulting from current and subsequent years' examinations, and we record tax liabilities as appropriate.

We establish liabilities for potential losses that may arise out of tax audits in accordance with FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109*. Once established, we adjust the liabilities when there is more information available or when an event occurs requiring an adjustment. Significant judgment is required in making these estimates, and the actual cost of a legal claim, tax assessment or regulatory fine or penalty may ultimately be materially different from our recorded liabilities, if any.

In preparing our consolidated financial statements, we calculate our income tax expense based on our interpretation of the tax laws in the various jurisdictions where we conduct business. This requires us to estimate our current tax obligations and the realizability of uncertain tax positions and to assess temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities. These temporary differences result in deferred tax assets and liabilities, the net current amount of which we show as a component of current assets or current liabilities and the net non-current amount of which we show as other assets or other liabilities on our consolidated balance sheet. We must also assess the likelihood that each of our deferred tax assets will be realized.

To the extent we believe that realization is not more likely than not, we establish a valuation allowance. When we establish a valuation allowance or increase this allowance in a reporting period, we generally record a corresponding tax expense in our consolidated statement of income. Conversely, to the extent circumstances indicate that a valuation allowance is no longer necessary, that portion of the valuation allowance is reversed, which generally reduces our overall income tax expense. See Note 19 to our consolidated financial statements for additional information about income taxes.

*Goodwill.* Goodwill represents the excess of the purchase price of acquired companies over the estimated fair value assigned to the identifiable assets acquired and liabilities assumed. We do not amortize goodwill, but instead test goodwill for impairment at least annually in the fourth quarter and, if necessary, we would record any impairment in accordance with SFAS 142, *Goodwill and Other Intangible Assets*. We will perform an impairment review between scheduled annual tests if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has goodwill is less than its carrying value. In the process of our annual impairment review, we primarily use the income approach methodology of valuation, which includes the discounted cash flow method, and the market approach methodology of valuation, which considers values of comparable businesses, to determine the fair value of our goodwill. Significant management judgment is required in the forecasts of future operating results and the discount rates that we used in the discounted cash flow method of valuation and in the selection of comparable businesses that we used in the market approach.

We reported \$33.8 million of goodwill at December 27, 2008, which represents the excess of the purchase price over the fair value of the identifiable net tangible and intangible assets that we acquired from Turner Renewable Energy, LLC. In accordance with SFAS 142, *Goodwill and Other Intangible Assets*, we performed our annual test of our goodwill for impairment in the fourth quarter of the year ended December 27, 2008 and concluded

**Table of Contents**

that it was not impaired. Testing goodwill for impairment involves two steps. The first step is comparing the fair value of a reporting unit containing goodwill to its carrying value. If the fair value of the reporting unit is less than its carrying value, impairment is indicated and step two of the test must be performed. That step involves determining the implied fair value of the reporting unit's goodwill by allocating the fair value of the reporting unit to the fair values of its identifiable assets and liabilities. Any excess of the fair value of the reporting unit over the net fair values of its identifiable assets and liabilities is attributed to goodwill, and any amount by which the carrying value of goodwill exceeds this implied fair value is written off as an impairment loss. In our test during the fourth quarter of 2008, we determined that the fair value of our solar power systems reporting unit, which contains all of our goodwill, exceeded its carrying value by approximately 80 percent. As a result, we concluded that there was no indication that our goodwill was impaired and that performing step two of the goodwill impairment test was not applicable.

*Marketable Securities.* We have classified our marketable securities as available-for-sale and present them at fair value on our balance sheet, with gains and losses recorded to accumulated other comprehensive income (loss) until realized. We determine the realized gains and losses on sales of marketable securities using the specific identification cost method. All of our available-for-sale marketable securities are subject to a periodic impairment review. We consider our marketable debt securities impaired when their fair value is less than their carrying value. We subject investments identified as being impaired to further review to determine if the investment is other than-temporarily impaired, in which case we would write down the investment to its impaired value and establish that amount as its new cost basis. We measure the fair value of our marketable securities using quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals) and we consider the effect of our counterparties credit standings in these fair value measurements. Determining the observable market values most relevant to the measurement of the fair value of marketable securities and the further counterparty credit risk adjustment to those values, if needed, requires significant judgment. Changes in market conditions can also significantly affect the fair value measurements from period to period and can cause realized values to vary significantly from previous estimates.

*Valuation of Derivative Instruments.* We use derivative instruments to manage a variety of risks, including currency exchange rate risk, interest rate risk and credit risk; we do not use derivative instruments for speculative or trading purposes. We believe that there are two aspects of accounting for our derivative instruments that require us to make significant estimates and judgments: measuring the fair values of the derivative instruments and applying special hedge accounting rules to some of them.

We report our derivative instruments on our consolidated balance sheet at their fair values. See Note 11 to our consolidated financial statements for information about how we measure the fair values of our derivative instruments. We believe that the types of derivative instruments that we use are commonly used by many companies outside the financial services industry and have well-established valuation models, which we apply. Also, we believe that there are readily available, reliable sources for the information that we need as inputs to these valuation models. However, the selection of the valuation models and the inputs we use in them still does require us to exercise significant judgment about their relevance to our measurement, any adjustments that they may require to properly measure our particular derivative instruments and their reliability. We also note that the amounts that we use as valuation model inputs can change significantly from one period to another as markets fluctuate. This can cause the fair value that we estimate for any specific derivative instrument to vary significantly from one period to another.

We designate some of our derivative instruments as cash-flow hedges pursuant to SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*. Under cash-flow hedge accounting, we record the portion of the change in the fair value of a derivative instrument that offsets, within a specified range, the change in the fair value of the specified future cash flow that it hedges as a component of other comprehensive income until the hedged cash flow affects the computation of our current income. At that time, we reclassify this effective portion of the net change in the fair value of the derivative instrument to current income.



Among other things, cash-flow hedge accounting requires us to test each hedging derivative instrument at the inception of the hedging relationship and at the end of each reporting period thereafter for its effectiveness in offsetting changes in the fair value of the hedged cash flow. If we determine that the overall hedging relationship is

**Table of Contents**

ineffective, we must discontinue cash-flow hedge accounting for the derivative instrument and record all its future fair value changes in current income. SFAS 133 also requires us to measure any portion of the change in the fair value of the derivative instrument that is not effective in offsetting changes in the fair value of the hedged cash flow and record that measured ineffectiveness in our current income. Because of these requirements, our estimates and judgments that affect the amounts that we measure for the fair value of our derivative instruments, and the hedged cash flows, can also have a significant impact on how we present changes in those fair values in our financial statements (current income versus other comprehensive income).

**Results of Operations**

The following table sets forth our consolidated statements of operations as a percentage of net sales for the years ended December 27, 2008, December 29, 2007 and December 30, 2006:

|                                     | <b>December 27,<br/>2008</b> | <b>Years Ended<br/>December 29,<br/>2007</b> | <b>December 30,<br/>2006</b> |
|-------------------------------------|------------------------------|--|------------------------------|
| Net sales                           | 100.0%                       | 100.0%                                       | 100.0%                       |
| Cost of sales                       | 45.6%                        | 50.1%  | 59.8%                        |
| Gross profit                        | 54.4%                        | 49.9%  | 40.2%                        |
| Research and development            | 2.7%                         | 3.0%   | 4.7%                         |
| Selling, general and administrative | 14.0%                        | 16.4%  | 24.7%                        |
| Production start-up                 | 2.6%                         | 3.3%   | 8.7%                         |
| Operating income                    | 35.1%                        | 27.2%  | 2.1%                         |
| Foreign currency gain (loss)        | 0.5%                         | 0.4%   | 4.1%                         |
| Interest income                     | 1.7%                         | 4.1%   | 2.0%                         |
| Interest expense, net               | 0.0%                         | (0.5)%                                       | (0.8)%                       |
| Other income (expense), net         | (0.1)%                       | (0.3)%                                       | (0.6)%                       |
| Income tax expense (benefit)        | 9.3%                         | (0.5)%                                       | 3.9%                         |
| Net income                          | 27.9%                        | 31.4%  | 2.9%                         |

***Fiscal Years Ended December 27, 2008 and December 29, 2007****Net sales*

|                               | <b>Years Ended<br/>2008</b> | <b>Years Ended<br/>2007</b> | <b>Year Over<br/>Year Change</b> |      |
|-------------------------------|-----------------------------|-----------------------------|----------------------------------|------|
| <b>(Dollars in thousands)</b> |                             |                             |                                  |      |
| Net sales                     | \$ 1,246,301                | \$ 503,976                  | \$ 742,325                       | 147% |

The increase in our net sales was due primarily to a 148% increase in the MW volume of solar modules sold during 2008 compared with 2007 due to strong demand for our solar modules in Europe. The increase in MW volume of solar modules sold is attributable to the full production ramp of our German plant, commencement of product shipments at the first two plants at our Malaysian manufacturing center and continued improvements to our manufacturing process. In addition, we increased the average number of sellable watts per solar module by approximately 4% during 2008 compared with 2007. Our average selling price decreased by approximately 1% during

2008 compared with 2007, mainly due to a 6.5% contractual price decline, partially offset by a 6% increase related to a favorable foreign exchange rate between the U.S. dollar and the euro. Approximately 74% of our net sales during 2008 resulted from sales of solar modules to customers headquartered in Germany.

**Table of Contents***Cost of sales*

|                | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|----------------|-------------------------------|-------------|--------------------|------|
|                | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |      |
|                | <b>(Dollars in thousands)</b> |             |                    |      |
| Cost of sales  | \$ 567,908                    | \$ 252,573  | \$ 315,335         | 125% |
| % of net sales | 45.6%                         | 50.1%       |                    |      |

The increase in our cost of sales was due to higher production and sales volumes, which resulted from the full production ramp of our German facility and commencement of production at our first three plants at our Malaysian manufacturing center. These factors caused a \$191.1 million increase in direct material expense, a \$13.8 million increase in warranty and end of life costs relating to the collection and recycling of our solar modules, a \$9.4 million increase in sales freight and other costs and a \$101.0 million increase in manufacturing overhead costs. The increase in manufacturing overhead costs was due to a \$40.5 million increase in salaries and personnel related expenses, including a \$2.4 million increase in share-based compensation expense, a \$30.7 million increase in facility and related expenses and a \$29.8 million increase in depreciation expense, in each case primarily resulting from increased infrastructure associated with our German and Malaysian expansions. Our cost of sales during 2008 reflects a benefit of \$2.0 million resulting from a change in the estimated amount of our warranty obligation.

*Gross profit*

|                | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|----------------|-------------------------------|-------------|--------------------|------|
|                | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |      |
|                | <b>(Dollars in thousands)</b> |             |                    |      |
| Gross profit   | \$ 678,393                    | \$ 251,403  | \$ 426,990         | 170% |
| % of net sales | 54.4%                         | 49.9%       |                    |      |

As a percentage of sales, gross profit increased 4.5 percentage points from 2007 to 2008, representing increased leverage of our fixed cost infrastructure and scalability associated with our German and Malaysian expansions, which drove a 148% increase in the number of megawatts sold. Our average manufacturing cost per watt decreased by 9% during 2008, while our average selling prices decreased by 1%. During 2008, foreign exchange gains due to a favorable exchange rate between the U.S. dollar and the euro and increased leverage of our fixed cost infrastructure contributed approximately 1.9% and 5.6%, respectively, to our gross profit, partially offset by a 3.0% decline in our average selling prices.

*Research and development*

|                          | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|--------------------------|-------------------------------|-------------|--------------------|------|
|                          | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |      |
|                          | <b>(Dollars in thousands)</b> |             |                    |      |
| Research and development | \$ 33,517                     | \$ 15,107   | \$ 18,410          | 122% |
| % of net sales           | 2.7%                          | 3.0%        |                    |      |

The increase in our research and development expense was due to a \$13.7 million increase in personnel related expense, including a \$1.2 million increase in share-based compensation expense, due to increased headcount and additional share-based compensation awards. In addition, consulting and other expenses increased by \$3.8 million and grant revenue increased by \$0.9 million during 2008 compared with 2007. Throughout 2008, we continued the development of solar modules with increased efficiencies at converting sunlight into electricity.

*Selling, general and administrative*

|                                     | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-------------------------------------|-------------------------------|-------------|--------------------|------|
|                                     | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |      |
|                                     | <b>(Dollars in thousands)</b> |             |                    |      |
| Selling, general and administrative | \$ 174,039                    | \$ 82,248   | \$ 91,791          | 112% |
| % of net sales                      | 14.0%                         | 16.4%       |                    |      |

**Table of Contents**

The increase in selling, general and administrative expense was due to a \$62.0 million increase in salaries and personnel-related expenses, including a \$15.5 million increase in share-based compensation. In addition, legal and professional service fees increased by \$13.0 million and other expenses increased by \$16.8 million during 2008. The increase resulted primarily from the expansion of our solar power system and project development business as well as operating a global manufacturing business.

*Production start-up*

|                     | <b>Years Ended</b>            |             | <b>Year Over</b>   |     |
|---------------------|-------------------------------|-------------|--------------------|-----|
|                     | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |     |
|                     | <b>(Dollars in thousands)</b> |             |                    |     |
| Production start-up | \$ 32,498                     | \$ 16,867   | \$ 15,631          | 93% |
| % of net sales      | 2.6%                          | 3.3%        |                    |     |

During 2008, we incurred \$32.5 million of production start-up expenses for our Ohio and Malaysian manufacturing expansion, including legal, regulatory and personnel costs, compared with \$16.9 million of production start-up expenses for our German and Malaysian plant expansions during 2007. Production start-up expenses are primarily the cost of labor and material and depreciation expense to run and qualify the production lines, related facility expenses, management of our replication process and legal and regulatory costs.

*Foreign exchange gain*

|                       | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-----------------------|-------------------------------|-------------|--------------------|------|
|                       | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |      |
|                       | <b>(Dollars in thousands)</b> |             |                    |      |
| Foreign exchange gain | \$ 5,722                      | \$ 1,881    | \$ 3,841           | 204% |

Foreign exchange gain increased by \$3.8 million during 2008 due to a substantial increase in our foreign currency denominated assets and liabilities and high volatility of the U.S. dollar relative to other currencies, in particular the euro.

*Interest income*

|                 | <b>Years Ended</b>            |             | <b>Year Over</b>   |    |
|-----------------|-------------------------------|-------------|--------------------|----|
|                 | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |    |
|                 | <b>(Dollars in thousands)</b> |             |                    |    |
| Interest income | \$ 21,158                     | \$ 20,413   | \$ 745             | 4% |

Interest income remained relatively flat primarily as a result of higher cash, cash equivalents and marketable securities balances during 2008, offset by a decline in interest rates.

*Interest expense, net*

|                       | <b>Years Ended</b>            |             | <b>Year Over</b>   |       |
|-----------------------|-------------------------------|-------------|--------------------|-------|
|                       | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |       |
|                       | <b>(Dollars in thousands)</b> |             |                    |       |
| Interest expense, net | \$ 509                        | \$ 2,294    | \$ (1,785)         | (78)% |

Interest expense, net of amounts capitalized, decreased primarily as a result of higher amounts of interest expense capitalized due to the construction of our Malaysian manufacturing center.

*Other expense, net*

|                    | <b>Years Ended</b>            |             | <b>Year Over</b>   |       |
|--------------------|-------------------------------|-------------|--------------------|-------|
|                    | <b>2008</b>                   | <b>2007</b> | <b>Year Change</b> |       |
|                    | <b>(Dollars in thousands)</b> |             |                    |       |
| Other expense, net | \$ 934                        | \$ 1,219    | \$ (285)           | (23)% |

**Table of Contents**

Other expense, net consisted mainly of financing fees related to our credit facilities. During 2008, other expense was reduced by a mark-to-market gain of \$0.6 million associated with our credit default swap.

*Income tax expense (benefit)*

|                              | <b>Years Ended</b>             |             | <b>Year Over</b>   |      |
|------------------------------|--------------------------------|-------------|--------------------|------|
|                              | <b>2008</b>                    | <b>2007</b> | <b>Year Change</b> |      |
|                              | <b>(Dollars in thousands)}</b> |             |                    |      |
| Income tax expense (benefit) | \$ 115,446                     | \$ (2,392)  | \$ 117,838         | N.M. |
| Effective tax rate           | 24.9%                          | (1.5%)      |                    |      |

Income tax expense increased by \$117.8 million, primarily due to the increase in pre-tax income of \$307.8 million, as well as the reversal of a valuation allowance in 2007 of \$54.9 million.

Our Malaysian subsidiary has been granted a tax holiday for a period of 16.5 years, which was originally scheduled to commence on January 1, 2009, which generally provides for a 100% exemption from Malaysian income tax. Subsequent to year end we received formal approval granting our request to pull forward this previously approved tax holiday by one year. Due to the fact that this approval was granted subsequent to the end of 2008, we concluded that the financial impact will be reflected in our first quarter of 2009 financial results. As a result we will recognize an income tax benefit of \$11.6 million in the first quarter of 2009. Had the exemption from Malaysian tax against our 2008 income been granted during 2008, our 2008 income tax expense would have been reduced by \$11.6 million to \$103.8 million. The effective tax rate would have been 22.4% rather than 24.9%.

*Fiscal Years Ended December 29, 2007 and December 30, 2006**Net sales*

|           | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-----------|-------------------------------|-------------|--------------------|------|
|           | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|           | <b>(Dollars in thousands)</b> |             |                    |      |
| Net sales | \$ 503,976                    | \$ 134,974  | \$ 369,002         | 273% |

The increase in our net sales was due primarily to a 259% increase in the MW volume of solar modules sold in 2007 compared to 2006. We were able to increase the MW volume of solar modules sold primarily as a result of the production ramp at our German plant, the full production of our Ohio expansion and continued improvements to our overall process. In addition, we increased the average number of sellable watts per solar module by approximately 11% in 2007 compared with 2006. Our average selling price increased by 4% during 2007 compared with 2006, mainly due to a 9% increase related to a favorable foreign exchange rate between the U.S. dollar and the euro, partially offset by a 5% annual contractual price decline. Approximately 91% of our net sales in 2007 resulted from sales of solar modules to customers headquartered in Germany.

*Cost of sales*

|  | <b>Years Ended</b> | <b>Year Over</b> |
|--|--------------------|------------------|
|--|--------------------|------------------|



|                | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|----------------|-------------------------------|-------------|--------------------|------|
|                | <b>(Dollars in thousands)</b> |             |                    |      |
| Cost of sales  | \$ 252,573                    | \$ 80,730   | \$ 171,843         | 213% |
| % of net sales | 50.1%                         | 59.8%       |                    |      |

Direct material expense increased by \$87.3 million, warranty and end of life costs relating to the collection and recycling of our solar modules increased by \$9.1 million, sales freight and other costs increased by \$3.2 million, in each case, primarily as a result of higher production volumes in 2007 compared with 2006. In addition, manufacturing overhead costs increased by \$72.2 million, which was primarily composed of an increase in salaries and personnel related expenses of \$43.0 million, including an increase in share-based compensation expense from \$4.2 million in 2006 to \$9.5 million in 2007, resulting from the infrastructure associated with our Ohio expansion and German plant build-out, facility and related expenses of \$16.0 million and depreciation expense of \$13.2 million, primarily as a result of additional equipment becoming operational at our Ohio and German plants.

**Table of Contents***Gross profit*

|                | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|----------------|-------------------------------|-------------|--------------------|------|
|                | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                | <b>(Dollars in thousands)</b> |             |                    |      |
| Gross profit   | \$ 251,403                    | \$ 54,244   | \$ 197,159         | 363% |
| % of net sales | 49.9%                         | 40.2%       |                    |      |

As a percentage of sales, gross profit increased 9.7 percentage points from 2006 to 2007, representing increased leverage of our fixed cost infrastructure and scalability associated with our plant expansions, which drove a 259% increase in the number of megawatts sold. During 2007, foreign exchange gains due to a favorable exchange rate between the U.S. dollar and the euro and increased leverage of our fixed cost infrastructure contributed 3.0% and 9.8%, respectively, to our gross profit, partially offset by a 3.1% annual contractual price decline. Additionally, we incurred \$7.6 million of costs, or 1.5% of revenues, associated with the ramp of our German plant in 2007, compared with \$1.1 million of costs, or 0.8% of revenues, incurred in 2006 related to the ramp of our Ohio expansion.

*Research and development*

|                          | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|--------------------------|-------------------------------|-------------|--------------------|------|
|                          | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                          | <b>(Dollars in thousands)</b> |             |                    |      |
| Research and development | \$ 15,107                     | \$ 6,361    | \$ 8,746           | 137% |
| % of net sales           | 3.0%                          | 4.7%        |                    |      |

The increase in research and development expense was primarily the result of a \$7.9 million increase in personnel related expense, including an increase in share-based compensation expense from \$2.3 million in 2006 to \$4.7 million in 2007, due to increased headcount and additional share-based compensation awards. Consulting and other expenses also increased by \$1.7 million and grant revenue increased by \$0.9 million in 2007 compared to 2006.

*Selling, general and administrative*

|                                     | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-------------------------------------|-------------------------------|-------------|--------------------|------|
|                                     | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                                     | <b>(Dollars in thousands)</b> |             |                    |      |
| Selling, general and administrative | \$ 82,248                     | \$ 33,348   | \$ 48,900          | 147% |
| % of net sales                      | 16.4%                         | 24.7%       |                    |      |

Selling, general and administrative expense increased primarily as a result of an increase in salaries and personnel-related expenses of \$36.1 million, due to increased headcount and an increase in share-based compensation from \$5.3 million in 2006 to \$23.4 million in 2007. In addition, legal and professional service fees increased by \$11.3 million and other expenses increased by \$1.5 million during 2007, primarily resulting from costs incurred in connection with being a public company and infrastructure build out to support our growth.

*Production start-up*

|                     | <b>Years Ended</b>            |             | <b>Year Over</b>   |     |
|---------------------|-------------------------------|-------------|--------------------|-----|
|                     | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |     |
|                     | <b>(Dollars in thousands)</b> |             |                    |     |
| Production start-up | \$ 16,867                     | \$ 11,725   | \$ 5,142           | 44% |
| % of net sales      | 3.3%                          | 8.7%        |                    |     |

In 2007, we incurred \$16.9 million of production start-up expenses related to our German and Malaysia expansions, including legal, regulatory and personnel costs, compared with \$11.7 million of production start-up expenses for our Ohio and German plant expansions during 2006. Production start-up expenses are primarily attributable to the cost of labor and material and depreciation expense to run and qualify the line, related facility expenses, management of our replication process and legal and regulatory costs.

**Table of Contents***Foreign exchange gain*

|                       | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-----------------------|-------------------------------|-------------|--------------------|------|
|                       | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                       | <b>(Dollars in thousands)</b> |             |                    |      |
| Foreign exchange gain | \$ 1,881                      | \$ 5,544    | \$ (3,663)         | N.M. |

Foreign exchange gain decreased by \$3.7 million from 2006 to 2007 primarily as a result of hedging the foreign exchange exposure in 2007 to mitigate some of the impact on the fluctuating dollar.

*Interest income*

|                 | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-----------------|-------------------------------|-------------|--------------------|------|
|                 | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                 | <b>(Dollars in thousands)</b> |             |                    |      |
| Interest income | \$ 20,413                     | \$ 2,648    | \$ 17,765          | N.M. |

The increase in interest income of \$17.8 million was primarily due to increased interest income resulting from higher cash, cash equivalent and marketable securities balances throughout 2007. We completed an initial public offering in the fourth quarter of 2006 which resulted in net proceeds of \$302.7 million and an equity follow-on public offering in the third quarter of 2007, which provided us with net proceeds of \$366.0 million. We also had higher investments in 2007 compared to 2006 that generated interest at higher rates.

*Interest expense, net*

|                       | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|-----------------------|-------------------------------|-------------|--------------------|------|
|                       | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                       | <b>(Dollars in thousands)</b> |             |                    |      |
| Interest expense, net | \$ 2,294                      | \$ 1,023    | \$ 1,271           | 124% |

Interest expense, net of amounts capitalized, increased by \$1.3 million from 2006 to 2007 primarily as a result of increased borrowings associated with our German plant financing. In 2007, we capitalized \$3.8 million of interest expense to construction in progress compared to \$3.3 million in 2006.

*Other expense*

|               | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|---------------|-------------------------------|-------------|--------------------|------|
|               | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|               | <b>(Dollars in thousands)</b> |             |                    |      |
| Other expense | \$ 1,219                      | \$ 799      | \$ 420             | N.M. |

The increase in other expense of \$0.4 million was primarily due to increased financing fees related to the IKB loans.

*Income tax expense (benefit)*

|                              | <b>Years Ended</b>            |             | <b>Year Over</b>   |      |
|------------------------------|-------------------------------|-------------|--------------------|------|
|                              | <b>2007</b>                   | <b>2006</b> | <b>Year Change</b> |      |
|                              | <b>(Dollars in thousands)</b> |             |                    |      |
| Income tax expense (benefit) | \$ (2,392)                    | \$ 5,206    | \$ (7,598)         | N.M. |

Our 2007 tax rate was a benefit of 1.5% which primarily reflects the net of a tax rate of 33.7% and a rate benefit of 35.2% due to the reversal of a valuation allowance on our deferred tax assets of \$54.9 million. The reversal was based upon our updated assessment of the future realization of our deferred income tax assets. The available positive evidence during fiscal 2007 included cumulative taxable income for the previous twelve quarters and a projection of future taxable income. The income tax expense for 2006 was the result of a change in corporate form from a limited liability company to a corporation, profitability in 2006 and a full valuation allowance against our deferred tax assets.

**Table of Contents****Liquidity and Capital Resources**

As of December 27, 2008, we had \$821.8 million in cash, cash equivalents and marketable securities, compared with \$669.7 million as of December 29, 2007. We believe that our current cash, cash equivalents, marketable securities, cash flows from operating activities, government grants and low interest debt financings for our German and Malaysian plant will be sufficient to meet our working capital and capital expenditures needs for at least the next 12 months. However, if our financial results or operating plans change from our current assumptions, we may not have sufficient resources to support our business plan. As a result, we may engage in one or more debt or equity financings in the future, which could result in increased expenses or dilution to our existing stockholders. If we are unable to obtain debt or equity financing on reasonable terms, we may be unable to execute our expansion strategy. See Item 1A: Risk Factors Our future success depends on our ability to build new manufacturing plants and add production lines in a cost-effective manner, both of which are subject risks and uncertainties.

The recent and unprecedented disruption in the current credit markets has had a significant adverse impact on a number of financial institutions. As of December 27, 2008, our liquidity and investments have not been materially adversely impacted by the current credit environment and we believe that they will not be materially adversely impacted in the near future. We will continue to closely monitor our liquidity and the credit markets. However, we cannot predict with any certainty the impact to us of any further disruption in the credit environment.

***Cash Flows***

Cash provided (used) was as follows for the twelve months ended December 27, 2008, December 29, 2007, and December 30, 2006 (in thousands):

|   | <b>Years Ended</b> |             |             |
|---|--------------------|-------------|-------------|
|   | <b>2008</b>        | <b>2007</b> | <b>2006</b> |
| Operating activities                      | \$ 463,067         | \$ 205,951  | \$ (576)    |
| Investing activities                      | (308,441)          | (547,250)   | (159,994)   |
| Financing activities                      | 177,549            | 430,421     | 451,550     |
| Effect of exchange rates on cash flows    | (20,221)           | 7,050       | 391         |
| Net increase in cash and cash equivalents | \$ 311,954         | \$ 96,172   | \$ 291,371  |

***Operating activities***

Cash provided by operating activities was \$463.1 million during 2008 compared with \$206.0 million during 2007. Net cash provided by operating activities during 2008 resulted primarily from an increase in net income, accounts payable and accrued expenses in this period as well as the impact of non-cash items that were recorded on the statements of income, primarily depreciation and amortization expense and stock-based compensation expense, offset by investments in accounts receivable and inventories to support growth. Our inventories increased by \$84.8 million during 2008 compared with 2007 primarily due to an increase in raw materials and work in process as a result of revenue growth. Income taxes paid, net of refunds during 2008 were \$2.0 million.

Cash received from customers increased to \$1,203.8 million during 2008 from \$516.0 million during 2007 primarily due to an increase in net sales. Our net sales increased from \$504.0 million during 2007 to \$1,246.3 million in 2008. This increase was partially offset by cash paid to suppliers and employees of \$723.1 million during 2008 compared

with cash paid to suppliers and associates of \$276.5 million during 2007, mainly due to an increase in raw material and component purchases, an increase in personnel-related costs due to higher headcount and other costs supporting our global expansion.

Cash provided by operating activities was \$206.0 million during 2007 compared to cash used in operating activities of \$0.6 million during 2006. Cash provided by interest earned increased to \$20.0 million during 2007 from \$2.6 million during 2006 mainly due to the increased cash from the initial public offering and the follow-on offering. Cash received from customers increased to \$516.0 million during 2007 from \$110.2 million during 2006 mainly due to an increase in net sales and shorter payment terms. This increase was partially offset by an increase in cash paid to suppliers and employees of \$276.5 million compared to cash paid to suppliers and employees of

## **Table of Contents**

\$111.9 million during 2006, mainly due to an increase in raw materials, an increase in personnel related costs due to higher headcount and other costs supporting our global expansion. Also, we paid cash of \$19.0 million for income taxes during 2007.

### *Investing activities*

Cash used in investing activities was \$308.4 million during 2008 compared with \$547.3 million during 2007. Cash used in investing activities during 2008 resulted primarily from capital expenditures of \$459.3 million, an equity investment of \$25.0 million and an increase of \$15.5 million in restricted accounts, offset by the net sale of marketable securities of \$191.4 million.

During 2008, we placed \$15.5 million of cash in restricted accounts to fund our solar module collection and recycling program and in October 2008, we made an equity investment of \$25.0 million in a U.S based company that will supply solar power plants to residential and commercial customers. The increase in capital expenditures was primarily due to our investments related to the construction of our new plants in Malaysia and Germany.

We expect to spend approximately \$300.0 million in capital expenditures for 2009 mainly related to the build-out of our Malaysian manufacturing center and the expansion of our Perrysburg, Ohio plant. A majority of our capital expenditures for 2009 will be incurred in foreign currency and therefore are subject to fluctuations in currency exchange rates.

Cash used in investing activities was \$547.3 million during 2007 compared with \$160.0 million during 2006. Cash used in investing activities resulted primarily from capital expenditures of \$242.4 million during 2007 and \$153.2 million during 2006 and the net purchase of marketable securities of \$293.4 million during 2007. The increase in capital expenditures was primarily due to our investments related to the construction of our new plants in Germany and Malaysia. Our cash outlays for the German plant were partially recovered through the receipt of \$9.5 million and \$16.8 million in 2007 and 2006, respectively, of economic development funding from various German governmental entities, which we classify as a cash flow from financing activities. Cash paid for the acquisition of Turner Renewable Energy, LLC, net of cash acquired during 2007 was \$5.5 million. During 2007 and 2006, we deposited \$6.0 million and \$6.8 million of cash into restricted accounts to fund our solar module collection and recycling program.

### *Financing activities*

Cash provided by financing activities was \$177.5 million during 2008 compared with \$430.4 million during 2007. Cash provided by financing activities during 2008 resulted primarily from investment incentives related to the construction of our plant in Frankfurt/Oder, Germany of \$35.7 million and proceeds from the issuance of debt, net of issuance costs, of \$138.9 million related to the equipment export financing agreement for our Malaysian manufacturing center. See Note 14 to our consolidated financial statements for more information about these credit facilities. These cash proceeds were partially offset by the repayment of long-term debt of \$41.7 million during 2008. Proceeds from the issuance of common stock during 2008 were \$16.0 million mainly due to proceeds received from the exercise of employee stock options. Proceeds from the issuance of common stock during 2007 were \$376.1 million mainly due to the receipt of \$366.0 million in net proceeds from the issuance of our common stock as a result of our follow-on offering and \$10.2 million of proceeds received from the exercise of employee stock options. Excess tax benefits from share-based compensation arrangements during 2008 were \$28.7 million.

Cash provided by financing activities was \$430.4 million during 2007 compared with \$451.6 million during 2006. During 2007 we received \$366.0 million in net proceeds primarily from the issuance of our common stock as a result of our follow-on offering and \$49.4 million from additional draws under debt facilities. Net proceeds from the exercise of stock options were \$10.2 million. Tax benefits related to the exercise of stock options during 2007 were



\$30.2 million. In addition, we received \$9.5 million in economic development funding from various German governmental entities related to the construction of our plant in Frankfurt/Oder, Germany. These receipts were partially offset by \$34.8 million in net repayments of long-term debt. During 2006, we received \$302.7 million in net proceeds from an initial public offering of our common stock, \$130.8 million in net proceeds from debt issued to third parties, \$36.0 million in loans from related parties, equity contributions from our sole owner prior to our IPO of \$30.0 million and receipt of \$16.8 million of economic development funding from various German governmental



|       |              |            |            |            |           |
|-------|--------------|------------|------------|------------|-----------|
| Total | \$ 1,381,422 | \$ 409,110 | \$ 669,785 | \$ 213,190 | \$ 89,337 |
|-------|--------------|------------|------------|------------|-----------|

- (1) Includes estimated cash interest to be paid over the remaining terms of the debt.
- (2) Purchase obligations are agreements to purchase goods or services that are enforceable and legally binding on us and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed minimum, or variable price provisions and the approximate timing of transactions.

In addition to the amounts shown in the table above, we have recorded \$7.5 million of unrecognized tax benefits as liabilities in accordance with FIN 48, and we are uncertain as to if or when such amounts may be settled.

**Table of Contents**

***Debt and Credit Sources***

On May 6, 2008, in connection with the plant expansion at our Malaysian manufacturing center, First Solar Malaysia Sdn. Bhd. ( FS Malaysia ), our indirect wholly-owned subsidiary entered into an export financing facility agreement ( Facility Agreement ) with IKB Deutsche Industriebank AG ( IKB ) as arranger NATIXIS Zweigniederlassung Deutschland ( NZD ) as facility agent and original lender, AKA Ausfuhrkredit-Gesellschaft mbH ( AKA ), as original lender and NATIXIS Labuan Branch ( NLB ) as security agent. Pursuant to the terms of the Facility Agreement, the lenders will furnish up to 134.0 million (\$187.6 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) of credit facilities consisting of the following:

(1) Five fixed-rate euro-denominated term loan facilities, which have the following maximum aggregate amounts:

- a) 16.9 million (\$23.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- b) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- c) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- d) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- e) 1.2 million (\$1.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and

(2) Five floating-rate euro-denominated term loan facilities, which have the following maximum aggregate amounts:

- a) 16.9 million (\$23.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- b) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- c) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
- d) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and
- e) 1.2 million (\$1.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00).

The loans under the fixed rate credit facilities will bear interest on the outstanding unpaid principal amount at an annual rate of 4.54%. The loans under the floating rate credit facilities will bear interest on the outstanding unpaid principal amount at Euribor plus a margin of 0.55%.

These credit facilities are intended to be used by FS Malaysia for the purpose of (1) partially financing the purchase of certain equipment to be used at our Malaysian manufacturing center and (2) financing fees to be paid to Euler-Hermes Kreditversicherungs- AG ( Euler-Hermes ), the German Export Credit Agency of Hamburg, Federal Republic of Germany, which will guaranty 95% of FS Malaysia s obligations related to the Facility Agreement ( Hermes Guaranty ). In addition, FS Malaysia s obligations related to the Facility Agreement are guaranteed, on an unsecured basis, by First Solar, Inc., pursuant to a guaranty agreement described below.

The Facility Agreement requires FS Malaysia to make 14 equal semi-annual repayments of the total principal borrowed under each of the credit facilities listed above. The first of these repayments commences on the earlier of (1) the day that is nine months after the date that the Malaysian manufacturing center plant to which the credit facility

relates becomes ready for operation and (2) a date specified for each credit facility, the earliest of which is

**Table of Contents**

September 30, 2008 for the credit facilities listed as (1) a) and (2) a) above. Principal repayments commenced on September 30, 2008.

FS Malaysia may voluntarily cancel commitments under the credit facilities and may make prepayments of amounts outstanding, in whole or in part, subject to minimum prepayment requirements and the payment of break costs. Subject to a limited exception, in the event that the Euler-Hermes Guaranty is (1) fully or partially withdrawn, or otherwise ceases to be in full force and effect or (2) repudiated by Euler-Hermes (or its intention to repudiate is evidenced in writing), or if any of the obligations of Euler-Hermes under the Euler-Hermes Guaranty ceases to be legal, valid, binding or in full force and effect, the loans made by any lender under any of the credit facilities may, at the direction of the lender, be declared immediately due and payable.

FS Malaysia is obligated to pay commitment fees at an annual rate of 0.375% on the unused portions of the fixed rate credit facilities and at an annual rate of 0.350% on the unused portions of the floating rate credit facilities. In addition, FS Malaysia is obligated to pay certain underwriting, management and agency fees in connection with the credit facilities.

In connection with the Facility Agreement, First Solar, Inc. entered into a first demand guaranty agreement dated May 6, 2008 in favor of IKB, NZD, NLB and the other lenders under the Facility Agreement. As stated above, FS Malaysia's obligations related to the Facility Agreement are guaranteed, on an unsecured basis, by First Solar pursuant to this guaranty agreement.

In connection with the Facility Agreement, all of FS Malaysia's obligations related to the Facility Agreement are secured by a first party, first legal charge over the equipment financed by the credit facilities and the other documents, contracts and agreements related to that equipment. Also in connection with the Facility Agreement, any payment claims of First Solar, Inc. against FS Malaysia are subordinated to the claims of IKB, NZD, NLB and the other lenders under the Facility Agreement.

The Facility Agreement contains various financial covenants with which we must comply, such as debt to equity ratios, total leverage ratios, interest coverage ratios and debt service coverage ratios. We must submit these ratios related to the financial covenants for the first time at the end of fiscal 2009. The Facility Agreement also contains various customary non-financial covenants with which FS Malaysia must comply, including, submitting various financial reports and business forecasts to the lenders, maintaining adequate insurance, complying with applicable laws and regulations and restricting on FS Malaysia's ability to sell or encumber assets and make loan guarantees to third parties. We were in compliance with these covenants through December 27, 2008.

As of December 27, 2008, we had outstanding borrowings of \$93.3 million (\$130.6 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) under the Facility Agreement.

On July 27, 2006, First Solar Manufacturing GmbH, a wholly owned indirect subsidiary of First Solar, Inc., entered into a credit facility agreement with a consortium of banks led by IKB Deutsche Industriebank AG under which we could draw up to \$102.0 million (\$142.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) to fund costs of constructing and starting up our German plant. This credit facility consisted of a term loan of up to \$53.0 million (\$74.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) and a revolving credit facility of \$27.0 million (\$37.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). The facility also provided for a bridge loan, which we drew against to fund construction costs that were later reimbursed through funding from the Federal Republic of Germany under the Investment Grant Act of 2005 ( *Investitionszulagen* ), of up to \$22.0 million (\$30.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). We can no longer make draw downs against the term loan and the bridge loan, and we can make drawdowns against the revolving credit facility until September 30, 2012. We incurred costs related to the credit facility totaling \$2.2 million

through December 29, 2007, which we recognized as interest and other financing expenses over the time that the borrowings were outstanding under the credit facility. We did not incur any costs related to the credit facility during fiscal 2008. We also pay an annual commitment fee of 0.6% of any amounts not drawn down on the credit facility.

At December 27, 2008, we had outstanding borrowings of \$55.0 million under the term loan, \$42.0 million of which we classify as long-term debt and \$13.0 million of which we classify as the current portion of long-term debt. We had no outstanding borrowings under the bridge loan at December 27, 2008. We repaid the bridge loan in

## **Table of Contents**

February 2008 with funding we received from the Federal Republic of Germany under the Investment Grant of 2005 and we cannot make any more draws against the bridge loan facility. We also had no outstanding borrowings under the revolving credit facility at December 27, 2008. At December 27, 2008 and December 29, 2007, interest rates were 6.7% and 6.3%, respectively, for the term loan; however, on January 1, 2009, the interest rate reset to 4.6%.

We must repay the term loan in twenty quarterly payments beginning on March 31, 2008 and ending on December 31, 2012. Once repaid, we may not draw again against the term loan facility. The revolving credit facility expires on and must be completely repaid by December 31, 2012. In certain circumstances, we must also use proceeds from fixed asset sales or insurance claims to make additional principal payments.

We pay interest at the annual rate of the Euro interbank offered rate (Euribor) plus 1.6% on the term loan and Euribor plus 1.8% on the revolving credit facility. Each time we make a draw against the revolving credit facility, we may choose to pay interest on that drawdown every one, three, or six months. The credit facility requires us to mitigate our interest rate risk on the term loan by entering into pay-fixed, receive-floating interest rate swaps covering at least 75% of the balance outstanding under the term loan.

The Federal Republic of Germany is guaranteeing 48% of our combined borrowings on the term loan and revolving credit facility and the State of Brandenburg is guaranteeing another 32%. We pay an annual fee, not to exceed 0.5 million (\$0.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) for these guarantees. In addition, we must maintain a debt service reserve of 3.0 million (\$4.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) in a restricted investment account, which the lenders may access if we are unable to make required payments on the credit facility. Substantially all of our assets in Germany, including the German plant, have been pledged as collateral for the credit facility and the government guarantees.

The credit facility contains various financial covenants with which we must comply. First Solar Manufacturing GmbH's cash flow available for debt service must be at least 1.1 times its required principal and interest payments for all its liabilities and the ratio of its total noncurrent liabilities to earnings before interest, taxes, depreciation and amortization may not exceed 3.0:1 from January 1, 2008, through December 31, 2008, 2.5:1 from January 1, 2009 through December 31, 2009 and 1.5:1 from January 1, 2010 through the remaining term of the credit facility.

The credit facility also contains various non-financial covenants with which we must comply. We must submit various financial reports, financial calculations and statistics, operating statistics and financial and business forecasts to the lender. We must adequately insure our German operation, and we may not change the type or scope of its business operations. First Solar Manufacturing GmbH must maintain adequate accounting and information technology systems. Also, First Solar Manufacturing GmbH cannot open any bank accounts (other than those required by the credit facility), sell any assets to third parties outside the normal course of business, make any loans or guarantees to third parties or allow any of its assets to be encumbered to the benefit of third parties without the consent of the lenders and government guarantors. We were in compliance with these covenants through December 27, 2008.

Our ability to withdraw cash from First Solar Manufacturing GmbH for use in other parts of our business is restricted while we have outstanding obligations under the credit facility and associated government guarantees. First Solar Manufacturing GmbH generally cannot make any payments to affiliates if doing so would cause its cash flow available for debt service to fall below 1.3 times its required principal and interest payments for all its liabilities for any one year period or cause the amount of its equity to fall below 30% of the amount of its total assets. First Solar Manufacturing GmbH also cannot pay commissions of greater than 2% to First Solar affiliates that sell or distribute its products. Furthermore, we may be required under certain circumstances to contribute more funds to First Solar Manufacturing GmbH, such as if all or part of the government guarantees are withdrawn.



During the year ended December 31, 2005, we received a \$15.0 million loan from the Director of Development of the State of Ohio, \$11.7 million of which was outstanding at December 27, 2008. Interest is payable monthly at the annual rate of 2.25%; principal payments commenced on December 1, 2006 and end on July 1, 2015. Land and buildings at our Ohio plant with a net book value of \$21.1 million at December 27, 2008 have been pledged as collateral for this loan.

During the year ended December 25, 2004, we received a \$5.0 million loan from the Director of Development of the State of Ohio, of which \$1.5 million was outstanding at December 27, 2008. Interest is payable monthly at

## **Table of Contents**

annual rates starting at 0.25% during the first year the loan is outstanding, increasing to 1.25% during the second and third years, increasing to 2.25% during the fourth and fifth years and increasing to 3.25% for each subsequent year; principal payments commenced on January 1, 2007 and end on December 1, 2009. Machinery and equipment at our Ohio plant with a net book value of \$7.7 million at December 27, 2008 have been pledged as collateral for this loan.

Our debt-financing agreements bear interest based on the Euro Interbank Offered Rate (Euribor). Euribor is the primary interbank lending rate within the Euro zone, with maturities ranging from one week to one year. A disruption of the credit environment as currently experienced could negatively impact interbank lending and therefore negatively impact the Euribor rate. An increase in the Euribor rate would increase our cost of borrowing.

On December 30, 2007, the beginning of our fiscal year 2008, we adopted SFAS 157. Our adoption of SFAS 157 was limited to our financial assets and financial liabilities, as permitted by FSP 157-2. We do not have any nonfinancial assets or nonfinancial liabilities that we recognize or disclose at fair value in our financial statements on a recurring basis. Our adoption of SFAS 157 did not have a material effect on our financial position and results of operations, and our fair value models do not make material use of unobservable inputs. See Note 11 to our consolidated financial statements for further information about our adoption of SFAS 157.

## **Off-Balance Sheet Arrangements**

We had no off-balance sheet arrangements as of December 27, 2008.

## **Recent Accounting Pronouncements**

See Note 2 to our consolidated financial statements filed with this Annual Report on Form 10-K for a summary of recent accounting pronouncements.

## **Item 7A: *Quantitative and Qualitative Disclosures about Market Risk***

### **Foreign Currency Exchange Risk**

Our international operations accounted for 95% of our net sales during 2008 and 98.8% of our net sales during 2007; all of these international sales were denominated in euro. As a result, we have exposure to foreign exchange risk with respect to almost all of our net sales. Fluctuations in exchange rates, particularly in the U.S. dollar to euro exchange rate, affect our gross and net profit margins and could result in foreign exchange and operating losses. In the past, most of our exposure to foreign exchange risk has related to currency gains and losses between the times we sign and settle our sales contracts. For example, our Long Term Supply Contracts obligate us to deliver solar modules at a fixed price in euros per watt and do not adjust for fluctuations in the U.S. dollar to euro exchange rate. For the year ended December 27, 2008, a 10% change in the euro exchange rates would have impacted our net euro sales by \$118.3 million. With the expansion of our manufacturing operations into Germany and the current expansion into Malaysia, many of our operating expenses for the plants in these countries will be denominated in the local currency.

Our primary foreign currency exposures are transaction, cash flow and translation:

*Transaction Exposure:* We have certain assets and liabilities, primarily receivables, investments, accounts payable (including inter-company transactions) and debt that are denominated in currencies other than the relevant entity's functional currency. In certain circumstances, changes in the functional currency value of these assets and liabilities create fluctuations in our reported consolidated financial position, results of operations and cash flows. We may enter into foreign exchange forward contracts or other instruments to minimize the effect of short-term foreign currency fluctuations on these assets and liabilities. The gains and losses on the foreign exchange forward contracts offset all or

part of the transaction gains and losses that we recognize in earnings on these assets and liabilities.

As of December 27, 2008, the total notional value of foreign exchange contracts to purchase euros with U.S. dollars was 175.2 million (\$245.3 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); the total notional value of foreign exchange contracts to sell euros for U.S. dollars was 123.0 million

## **Table of Contents**

(\$172.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and the total notional value of foreign exchange contracts to purchase Malaysian ringgit with U.S. dollars was MYR 148.0 million (\$42.9 million at the balance sheet close rate on December 27, 2008 of \$0.29/MYR1.00). As of December 27, 2008, the unrealized loss of these forward contracts was \$0.8 million. These foreign exchange forward contracts have maturities of 24 months or less. These currency forward contracts hedge third party balance sheet exposure.

If the U.S. dollar would have weakened by 10%, the adverse impact on our income before income taxes related to our foreign exchange contracts to purchase and sell euro and Malaysian ringgit would have been \$7.3 million and \$4.3 million, respectively.

*Cash Flow Exposure:* We have forecasted future cash flows, including revenues and expenses, denominated in currencies other than the relevant entity's functional currency. Our primary cash flow exposures include future customer collections and vendor payments. Changes in the relevant entity's functional currency value will cause fluctuations in the cash flows we expect to receive when these cash flows are realized or settled. We may enter into foreign exchange forward contracts or other derivatives to hedge the value of a portion of these cash flows. We account for these foreign exchange contracts as cash flow hedges. We initially report the effective portion of the derivative's gain or loss as a component of accumulated other comprehensive income (loss) and subsequently reclassify it into earnings when the hedged transaction is settled.

Most of our German plant's operating expenses are denominated in euros, creating natural hedges against the currency risk in our net sales. In addition, we purchased forward contracts to hedge the exchange risk on forecasted cash flows denominated in euro. As of December 27, 2008, the total notional value of these forward contracts was 625.1 million (\$875.1 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00).

*Earnings Translation Exposure:* Fluctuations in foreign currency exchange rates create volatility in our reported results of operations because we are required to consolidate financial statements of our foreign currency denominated subsidiaries. We may decide to purchase forward exchange contracts or other instruments to offset this impact from currency fluctuations. These contracts would be marked-to-market on a monthly basis and any unrealized gain or loss would be recorded in interest and other income, net. We do not hedge translation exposure at this time but may do so in the future.

In the past, currency exchange rate fluctuations have had an impact on our business and results of operations. For example, currency exchange rate fluctuations negatively impacted our cash flows by \$20.2 million during 2008 and positively impacted our cash flows by \$7.1 million during 2007. Although we cannot predict the impact of future currency exchange rate fluctuations on our business or results of operations, we believe that we have increased risk associated with currency exchange rate fluctuations in the future.

## **Interest Rate Risk**

We are exposed to interest rate risk because many of our customers depend on debt and equity financing to purchase and install a solar power system. Although the useful life of a solar electricity generation system is approximately 25 years, end-users of our solar modules must pay the entire cost of the system at the time of installation. As a result, many of our customers rely on debt financing to fund their up-front capital expenditure. An increase in interest rates could make it difficult for our end-users to secure the financing necessary to purchase and install a system. This could lower demand for our solar modules and system development services and reduce our net sales. In addition, we believe that a significant percentage of our end-users install solar power systems as an investment, funding the initial capital expenditure through a combination of equity and debt. An increase in interest rates could lower an investor's return on investment in a system or make alternative investments more attractive relative to solar power systems, which, in each case, could cause these end-users to seek alternative investments that promise higher returns.

During 2006, we entered into a credit facility with a consortium of banks, which bears interest at Euribor plus 1.6%. As of December 27, 2008, we hedged our exposure to changes in Euribor using interest rate swaps with a combined notional value of 39.1 million (\$54.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00).

## **Table of Contents**

During May of 2008, we entered into a credit facility with IKB, Natixis, Natixis Labuan Branch and Ausfuhrkredit-Gesellschaft mbH which is denominated in euro. The loans under fixed-rate credit facility will bear interest on the outstanding unpaid principal balance at an annual rate of 4.54%. The loans under the floating-rate credit facility will bear interest on the outstanding unpaid principal balance at Euribor plus a margin of 0.55%.

In addition, we invest some of our cash in debt securities, which exposes us to interest rate risk. 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. Some of the securities in which we invest may be subject to market risk. This means that a change in prevailing interest rates may cause the market value of the investment to fluctuate. For example, if we hold a security that was issued with an interest rate fixed at the then-prevailing rate and the prevailing interest rate later rises, the market value of our investment will probably decline. To minimize this risk, we maintain our portfolio of cash equivalents and marketable securities in a variety of securities, including money market funds, government and non-government debt securities and certificates of deposit. As of December 27, 2008, our fixed-income investments earned a pretax yield of approximately 1.6%, with a weighted average maturity of 6.1 months. If interest rates were to instantaneously increase (decrease) by 100 basis points, the market value of our total investment portfolio could decrease (increase) by approximately \$0.9 million. The direct risk to us associated with fluctuating interest rates is limited to our investment portfolio and we do not believe that a 10% change in interest rates will have a significant impact on our financial position, results of operations or cash flows. As of December 27, 2008, all of our investments were in money market accounts, federal and foreign agency debt and corporate debt securities.

## **Commodity and Component Risk**

We are exposed to price risks for the raw materials, components and energy costs used in the manufacture and transportation of our solar modules. Also, some of our raw materials and components are sourced from a limited number of suppliers or a sole supplier. We endeavor to qualify multiple suppliers, a process which could take up to 12 months if successful, but some suppliers are unique and it may not be feasible to qualify second source suppliers. In some cases, we also enter into long term supply contracts for raw materials and components, but these arrangements are normally of shorter duration than the term of our Long Term Supply Contracts with our customers. As a result, we remain exposed to price changes in the raw materials and components used in our modules. In addition, a failure by a key supplier could disrupt our supply chain which could result in higher prices for our raw materials and components and even a disruption in our manufacturing process. Since our selling price under our Long Term Supply Contracts does not adjust in the event of price changes in our underlying raw materials or components and since our Long Term Supply Contracts require minimum deliveries of our products during their term, we are unable to pass along changes in the cost of the raw materials and components for our products and may be in default of our delivery obligations if we experience a manufacturing disruption.

## **Credit Risk**

We have certain financial and derivative instruments that potentially subject us to credit risk. These consist primarily of cash, cash equivalents, investments, trade accounts receivable, interest rate swap agreements and forward foreign exchange 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, interest rate swap agreements and enter into derivative contracts with high-quality financial institutions, and limit the amount of credit risk from any one counterparty. We continuously evaluate the credit standing of our counterparty financial institutions.

In addition, we have certain restricted investments that are exposed to credit risk. These consist primarily of restricted investments, which are held by a subsidiary of a financial services company to fund our estimated future product collection and recycling costs. As of December 27, 2008 our restricted investments with this financial services

company were \$25.8 million. In October 2008 we entered into credit default swaps (CDS) against the parent company of this financial services company to protect our investment from a significant pre-defined credit event to our counter party. Under a CDS, a third party assumes for a fee, a portion of the credit risk related to the investment. The CDS we entered into provides protection for losses in the event of a pre-defined credit event of the parent company of the financial services company up to \$25.0 million. These CDS expire on March 20, 2009 and June 20, 2009, respectively.

**Table of Contents****Item 8: Financial Statements and Supplementary Data****Consolidated Financial Statements**

The consolidated financial statements of First Solar required by this item are included in the section entitled Consolidated Financial Statements of this Annual Report on Form 10-K. See Item 15(a)(1) for a list of our consolidated financial statements.

**Selected Quarterly Financial Data (Unaudited)**

The following selected quarterly financial data should be read in conjunction with our consolidated financial statements, the related notes and Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations. This information has been derived from our unaudited consolidated financial statements that, in our opinion, reflect all recurring adjustments necessary to fairly present this information when read in conjunction with our consolidated financial statements and the related notes appearing in the section entitled Consolidated Financial Statements. The results of operations for any quarter are not necessarily indicative of the results to be expected for any future period.

|                                     | <b>Dec 27,<br/>2008</b>                         | <b>Sep 27,<br/>2008</b> | <b>Jun 28,<br/>2008</b> | <b>Mar 29,<br/>2008</b> | <b>Dec 29,<br/>2007</b> | <b>Sep 29,<br/>2007</b> | <b>Jun 30,<br/>2007</b> | <b>Mar 31,<br/>2007</b> |
|-------------------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                     | <b>(In thousands, except per share amounts)</b> |                         |                         |                         |                         |                         |                         |                         |
| Net sales                           | \$ 433,651                                      | \$ 348,694              | \$ 267,041              | \$ 196,915              | \$ 200,797              | \$ 159,007              | \$ 77,223               | \$ 66,949               |
| Cost of sales                       | 199,725   | 153,251                 | 122,341                 | 92,591                  | 89,847                  | 76,967                  | 48,852                  | 36,907                  |
| Gross profit                        | 233,926   | 195,443                 | 144,700                 | 104,324                 | 110,950                 | 82,040                  | 28,371                  | 30,042                  |
| Operating expenses:                 |   |                         |                         |                         |                         |                         |                         |                         |
| Research and development            | 11,080  | 9,952                   | 7,725                   | 4,760                   | 4,432                   | 3,854                   | 3,763                   | 3,058                   |
| Selling, general and administrative | 52,747  | 48,995                  | 43,626                  | 28,671                  | 24,191                  | 27,082                  | 17,285                  | 13,690                  |
| Production start-up                 | 8,771   | 6,344                   | 4,622                   | 12,761                  | 4,065                   | 2,805                   | 1,523                   | 8,474                   |
| Total operating expenses            | 72,598  | 65,291                  | 55,973                  | 46,192                  | 32,688                  | 33,741                  | 22,571                  | 25,222                  |
| Operating income                    | 161,328   | 130,152                 | 88,727                  | 58,132                  | 78,262                  | 48,299                  | 5,800                   | 4,820                   |
| Foreign currency gain (loss)        | 6,190   | (1,889)                 | 647                     | 774                     | 1,165                   | 965                     | 21                      | (270)                   |
| Interest and other income, net      | 4,094   | 4,836                   | 4,482                   | 6,303                   | 6,713                   | 4,385                   | 2,043                   | 3,759                   |
| Income before income taxes          | 171,612   | 133,099                 | 93,856                  | 65,209                  | 86,140                  | 53,649                  | 7,864                   | 8,309                   |
| Income tax expense (benefit)        | 38,841  | 33,830                  | 24,185                  | 18,590                  | 23,266                  | 7,615                   | (36,554)                | 3,281                   |
| Net income                          | \$ 132,771                                      | \$ 99,269               | \$ 69,671               | \$ 46,619               | \$ 62,874               | \$ 46,034               | \$ 44,418               | \$ 5,028                |



|   |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |
|---|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|
| Net income per share:   |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |
| Basic   | \$ | 1.63   | \$ | 1.23   | \$ | 0.87   | \$ | 0.59   | \$ | 0.80   | \$ | 0.61   | \$ | 0.61   | \$ | 0.07   |
| Diluted   | \$ | 1.61   | \$ | 1.20   | \$ | 0.85   | \$ | 0.57   | \$ | 0.77   | \$ | 0.58   | \$ | 0.58   | \$ | 0.07   |
| Weighted-average number of shares used in per share calculations: |    |        |    |        |    |        |    |        |    |        |    |        |    |        |    |        |
| Basic   |    | 81,345 |    | 80,430 |    | 79,877 |    | 79,059 |    | 78,192 |    | 75,666 |    | 72,596 |    | 72,347 |
| Diluted   |    | 82,450 |    | 82,436 |    | 82,004 |    | 81,607 |    | 81,318 |    | 79,088 |    | 76,089 |    | 75,392 |

**Table of Contents**

**Item 9: *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

**Item 9A: *Controls and Procedures***

**(a) Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures, as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure control and procedure also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Annual Report on Form 10-K, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

**(b) Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 27, 2008 based on the criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America.

Based on the results of our evaluation, our management concluded that our internal control over financial reporting was effective as of December 27, 2008.

The effectiveness of our internal control over financial reporting as of December 27, 2008 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

**(c) Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting that occurred during the fourth quarter ended December 27, 2008 covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely

to materially affect, our internal control over financial reporting.

**(d) Inherent Limitations on Effectiveness of Controls**

Our management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are

**Table of Contents**

resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

**Item 9B: *Other Information***

None.

**PART III**

**Item 10: *Directors and Executive Officers of the Registrant***

Information concerning our board of directors and audit committee appears in our 2009 Proxy Statement, under the section entitled Directors. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

For information with respect to our executive officers, see Part I, Item 1 of this Annual Report on Form 10-K under the heading entitled Executive Officers of the Registrant.

Information concerning Section 16(a) beneficial ownership reporting compliance appears in our 2009 Proxy Statement under the section entitled Section 16(a) Beneficial Ownership Reporting Compliance. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

We have adopted a Statement of Corporate Code of Business Conduct and Ethics that applies to all directors, officers and employees of First Solar. Information concerning this code appears in our 2009 Proxy Statement under the section entitled Proposal No. 1 Election of Directors Corporate Governance. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

**Item 11: *Executive Compensation***

Information concerning executive compensation and related information appears in our 2009 Proxy Statement under the section entitled Executive Compensation and Related Information. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

**Item 12: *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

Information concerning the security ownership of certain beneficial owners and management and related stockholder matters, including information regarding our equity compensation plans, appears in our 2009 Proxy Statement under the section entitled Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

**Item 13: *Certain Relationships and Related Transactions, and Director Independence***

Information concerning certain relationships and related party transactions appears in our 2009 Proxy Statement under the section entitled Certain Relationships and Related Party Transactions. The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

**Table of Contents****Item 14: *Principal Accountant Fees and Services***

Information concerning principal accountant fees and services and the audit committee's pre-approval policies and procedures appears in our 2009 Proxy Statement under the section entitled "Principal Accountant Fees and Services." The information in that portion of the Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

**PART IV****Item 15: *Exhibits and Financial Statement Schedules***

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

Financial Statements

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Members /Stockholders' Equity and Comprehensive Income

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

(2) Financial Statement Schedule:

Schedule II - Valuation and Qualifying Accounts**SCHEDULE II: VALUATION AND QUALIFYING ACCOUNTS**

For the Years Ended December 30, 2006, December 29, 2007 and December 27, 2008

| Description   | Balance<br>at<br>Beginning<br>of Year | Additions | Deductions | Balance<br>at End of<br>Year |
|---|---------------------------------------|-----------|------------|------------------------------|
|   | (In thousands)                        |           |            |                              |
| Allowance for doubtful accounts receivable          |                                       |           |            |                              |
| Year ended December 30, 2006                        | \$ 4                                  | \$        | \$         | \$ 4                         |
| Year ended December 29, 2007                        | \$ 4                                  | \$ 5      | \$ (4)     | \$ 5                         |
| Year ended December 27, 2008                        | \$ 5                                  | \$ 711    | \$ (716)   | \$                           |
| Reserve for excess and obsolete inventory           |                                       |           |            |                              |
| Year ended December 30, 2006                        | \$                                    | \$ 48     | \$ (37)    | \$ 11                        |
| Year ended December 29, 2007                        | \$ 11                                 | \$ 45     | \$ (11)    | \$ 45                        |
| Year ended December 27, 2008                        | \$ 45                                 | \$ 2,548  | \$ (1,617) | \$ 976                       |
| Valuation allowance against our deferred tax assets |                                       |           |            |                              |
| Year ended December 30, 2006                        | \$ 1,865                              | \$ 53,025 | \$         | \$ 54,890                    |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|                              |           |          |             |          |
|------------------------------|-----------|----------|-------------|----------|
| Year ended December 29, 2007 | \$ 54,890 | \$ 596   | \$ (54,890) | \$ 596   |
| Year ended December 27, 2008 | \$ 596    | \$ 1,097 | \$ (596)    | \$ 1,097 |

(3) Exhibits: See Item 15(b) below.

(b) Exhibits: The exhibits listed on the accompanying Index to Exhibits on this Form 10-K are filed, or incorporated into this Form 10-K by reference.

(c) Financial Statement Schedule: See Item 15(a) above.

**Table of Contents**

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized on February 24, 2009.

FIRST SOLAR, INC.

By: /s/ JENS MEYERHOFF  
 Jens Meyerhoff  
*Chief Financial Officer*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

| <b>Signature</b>  | <b>Title</b>                         | <b>Date</b>       |
|---|--------------------------------------|-------------------|
| Principal Executive Officer and Director:                     |                                      |                   |
| /s/ MICHAEL J. AHEARN<br><br>Michael J. Ahearn                | Chief Executive Officer and Director | February 24, 2009 |
| Principal Financial Officer and Principal Accounting Officer: |                                      |                   |
| /s/ JENS MEYERHOFF<br><br>Jens Meyerhoff                      | Chief Financial Officer              | February 24, 2009 |
| Additional Directors:   |                                      |                   |
| * JAMES F. NOLAN<br><br>James F. Nolan                        | Director                             | February 24, 2009 |
| * J. THOMAS PRESBY<br><br>J. Thomas Presby                    | Director                             | February 24, 2009 |
| /s/ BRUCE SOHN<br><br>Bruce Sohn                              | Director                             | February 24, 2009 |
| * PAUL H. STEBBINS  | Director                             | February 24, 2009 |



Paul H. Stebbins

\* MICHAEL SWEENEY

Director

February 24, 2009

Michael Sweeney

\* CRAIG KENNEDY

Director

February 24, 2009

Craig Kennedy

**Table of Contents**

| <b>Signature</b>   | <b>Title</b> | <b>Date</b>       |
|--|--------------|-------------------|
| * JOSE VILLAREAL<br><br>Jose Villareal   | Director     | February 24, 2009 |
| * By: /s/ JENS MEYERHOFF<br><br>Jens Meyerhoff, as Attorney-In-Fact<br>for each of the persons indicated |              |                   |

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To Board of Directors and Stockholders of First Solar, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of members /stockholders' equity and comprehensive income (loss), and of cash flows present fairly, in all material respects, the financial position of First Solar, Inc. and its subsidiaries at December 27, 2008 and December 29, 2007, and the results of their operations and their cash flows for each of the three years in the period ended December 27, 2008 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 27, 2008, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP

Phoenix, Arizona  
February 24, 2009

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES**

## Consolidated Balance Sheets

|  | <b>December 27,<br/>2008</b>                 | <b>December 29,<br/>2007</b> |
|--|--|------------------------------|
|  | <b>(In thousands, except share<br/>data)</b> |                              |
| <b>ASSETS</b>                                |  |                              |
| Current assets:                              |  |                              |
| Cash and cash equivalents                    | \$ 716,218                                   | \$ 404,264                   |
| Marketable securities - current              | 76,042                                       | 232,686                      |
| Accounts receivable, net                     | 61,703                                       | 18,165                       |
| Inventories                                  | 121,554                                      | 40,204                       |
| Deferred project costs                       | 710  | 2,643                        |
| Economic development funding receivable      | 668  | 35,877                       |
| Deferred tax asset, net - current            | 9,922  | 3,890                        |
| Prepaid expenses and other current assets    | 90,584                                       | 64,780                       |
| Total current assets                         | 1,077,401                                    | 802,509                      |
| Property, plant and equipment, net           | 842,622                                      | 430,104                      |
| Deferred tax asset, net - noncurrent         | 61,325                                       | 51,811                       |
| Marketable securities - noncurrent           | 29,559                                       | 32,713                       |
| Restricted cash and investments              | 30,059                                       | 14,695                       |
| Investment in related party                  | 25,000                                       |                              |
| Goodwill                                     | 33,829                                       | 33,449                       |
| Other assets - noncurrent                    | 14,707                                       | 6,031                        |
| Total assets                                 | \$ 2,114,502                                 | \$ 1,371,312                 |
| <b>LIABILITIES AND STOCKHOLDERS EQUITY</b>   |  |                              |
| Current liabilities:                         |  |                              |
| Accounts payable                             | \$ 46,251                                    | \$ 26,441                    |
| Income tax payable                           | 99,938                                       | 24,487                       |
| Accrued expenses                             | 140,899                                      | 76,256                       |
| Short-term debt                              |  | 24,473                       |
| Current portion of long-term debt            | 34,951                                       | 14,836                       |
| Other current liabilities                    | 59,738                                       | 14,803                       |
| Total current liabilities                    | 381,777                                      | 181,296                      |
| Accrued collection and recycling liabilities | 35,238                                       | 13,079                       |
| Long-term debt                               | 163,519                                      | 68,856                       |
| Other liabilities - noncurrent               | 20,926                                       | 10,814                       |

|  |              |              |
|--|--------------|--------------|
| Total liabilities  | 601,460      | 274,045      |
| Stockholders' equity:  |              |              |
| Common stock, \$0.001 par value per share; 500,000,000 shares authorized;<br>81,596,810 and 78,575,211 shares issued and outstanding at December 27, 2008<br>and December 29, 2007, respectively | 82           | 79           |
| Additional paid-in capital   | 1,176,156    | 1,079,775    |
| Accumulated earnings   | 361,225      | 12,895       |
| Accumulated other comprehensive income (loss)  | (24,421)     | 4,518        |
| Total stockholders' equity   | 1,513,042    | 1,097,267    |
| Total liabilities and stockholders' equity   | \$ 2,114,502 | \$ 1,371,312 |

See accompanying notes to these consolidated financial statements.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Consolidated Statements of Operations**

|   | <b>December 27,<br/>2008</b>                    | <b>Year Ended<br/>December 29,<br/>2007</b> | <b>December 30,<br/>2006</b> |
|---|---|---|------------------------------|
|   | <b>(In thousands, except per share amounts)</b> |   |                              |
| Net sales   | \$ 1,246,301                                    | \$ 503,976                                  | \$ 134,974                   |
| Cost of sales   | 567,908   | 252,573                                     | 80,730                       |
| Gross profit  | 678,393   | 251,403                                     | 54,244                       |
| Operating expenses:   |   |   |                              |
| Research and development  | 33,517  | 15,107                                      | 6,361                        |
| Selling, general and administrative                               | 174,039   | 82,248                                      | 33,348                       |
| Production start-up   | 32,498  | 16,867                                      | 11,725                       |
| Total operating expenses  | 240,054   | 114,222                                     | 51,434                       |
| Operating income  | 438,339   | 137,181                                     | 2,810                        |
| Foreign currency gain   | 5,722   | 1,881                                       | 5,544                        |
| Interest income   | 21,158  | 20,413                                      | 2,648                        |
| Interest expense, net   | (509)   | (2,294)                                     | (1,023)                      |
| Other income (expense), net                                       | (934)   | (1,219)                                     | (799)                        |
| Income before income taxes  | 463,776   | 155,962                                     | 9,180                        |
| Income tax expense (benefit)                                      | 115,446   | (2,392)                                     | 5,206                        |
| Net income  | \$ 348,330                                      | \$ 158,354                                  | \$ 3,974                     |
| Net income per share:   |   |   |                              |
| Basic   | \$ 4.34   | \$ 2.12                                     | \$ 0.07                      |
| Diluted   | \$ 4.24   | \$ 2.03                                     | \$ 0.07                      |
| Weighted-average number of shares used in per share calculations: |   |   |                              |
| Basic   | 80,178  | 74,701                                      | 56,310                       |
| Diluted   | 82,124  | 77,971                                      | 58,255                       |

See accompanying notes to these consolidated financial statements.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Consolidated Statements of Members /Stockholders Equity and Comprehensive Income (Loss)**

|  | Membership Equity |            | Common Stock |        | Additional<br>Paid-In     | Accumulated<br>Earnings | Accumulated<br>Other<br>Comprehensive<br>Income | Total     |
|--|-------------------|------------|--------------|--------|---------------------------|-------------------------|---|-----------|
|  | Units             | Amount     | Shares       | Amount | Capital<br>(In thousands) | (Deficit)               | (Loss)  | Equity    |
| Balance, December 31,<br>2005  | 45,214            | \$ 162,307 |              | \$     | \$                        | \$ (149,377)            | \$ 199  | \$ 13,129 |
| Components of<br>comprehensive income, net<br>of tax:  |                   |            |              |        |                           |                         |   |           |
| Net income   |                   |            |              |        |                           | 3,974                   |   | 3,974     |
| Foreign currency<br>translation adjustments  |                   |            |              |        |                           |                         | 803   | 803       |
| Change in unrealized gain<br>on derivative instruments<br>designated and qualifying<br>as cash flow hedges |                   |            |              |        |                           |                         | 20  | 20        |
| Total comprehensive<br>income  |                   |            |              |        |                           |                         |   | 4,797     |
| Cash contributions from<br>owner   | 6,613             | 30,000     |              |        |                           |                         |   | 30,000    |
| Proceeds from sales of<br>shares through share-based<br>compensation plans, net of<br>excess tax benefits  |                   |            | 49           |        | 143                       |                         |   | 143       |
| Conversion of membership<br>units into common shares   | (51,827)          | (192,307)  | 51,827       | 11     | 192,296                   |                         |   |           |
| Common stock issued upon<br>conversion of convertible<br>notes   |                   |            | 4,261        | 1      | 73,999                    |                         |   | 74,000    |
| Common stock issued in<br>initial public offering, net<br>of offering costs                                |                   |            | 16,193       | 16     | 302,634                   |                         |   | 302,650   |
| Share-based compensation<br>reclassifications to<br>employee stock options on<br>redeemable shares         |                   |            | 2            |        | 11,682                    |                         |   | 11,682    |
| Effect of stock split  |                   |            |              | 44     | (24,961)<br>(44)          |                         |   | (24,961)  |
|  |                   |            | 72,332       | 72     | 555,749                   | (145,403)               | 1,022   | 411,440   |



Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|  |        |    |           |         |          |  |           |
|--|--------|----|-----------|---------|----------|--|-----------|
| Balance, December 30, 2006   |        |    |           |         |          |  |           |
| Components of comprehensive income, net of tax:  |        |    |           |         |          |  |           |
| Net income   |        |    |           | 158,354 |          |  | 158,354   |
| Foreign currency translation adjustments   |        |    |           |         | 5,116    |  | 5,116     |
| Unrealized loss on derivative instruments, net of tax  |        |    |           |         | (1,648)  |  | (1,648)   |
| Unrealized gain on marketable securities, net of tax   |        |    |           |         | 28       |  | 28        |
| Total comprehensive income   |        |    |           |         |          |  | 161,850   |
| Cumulative effect of the adoption of FIN 48  |        |    |           | (56)    |          |  | (56)      |
| Proceeds from sales of shares through share-based compensation plans, net of excess tax benefits | 2,125  | 2  | 40,367    |         |          |  | 40,369    |
| Common stock issued for acquisition  | 118    | 1  | 28,066    |         |          |  | 28,067    |
| Common stock issued in secondary offering, net of offering costs                                 | 4,000  | 4  | 365,965   |         |          |  | 365,969   |
| Share-based compensation reclassifications from employee stock options on redeemable shares      |        |    | 39,402    |         |          |  | 39,402    |
|  |        |    | 50,226    |         |          |  | 50,226    |
| Balance, December 29, 2007   | 78,575 | 79 | 1,079,775 | 12,895  | 4,518    |  | 1,097,267 |
| Components of comprehensive income, net of tax:  |        |    |           |         |          |  |           |
| Net income   |        |    |           | 348,330 |          |  | 348,330   |
| Foreign currency translation adjustments   |        |    |           |         | (13,943) |  | (13,943)  |
| Unrealized loss on derivative instruments, net of tax  |        |    |           |         | (15,230) |  | (15,230)  |
| Unrealized gain on marketable securities, net of tax   |        |    |           |         | 234      |  | 234       |
| Total comprehensive income   |        |    |           |         |          |  | 319,391   |

proceeds from sales of  
 shares through share-based  
 compensation plans, net of  
 excess tax benefits  
 share-based compensation

|       |   |        |  |  |  |        |
|-------|---|--------|--|--|--|--------|
| 3,022 | 3 | 37,654 |  |  |  | 37,657 |
|       |   | 58,727 |  |  |  | 58,727 |

Balance, December 27,  
 2008

|        |    |           |         |          |  |           |
|--------|----|-----------|---------|----------|--|-----------|
| 81,597 | 82 | 1,176,156 | 361,225 | (24,421) |  | 1,513,042 |
|--------|----|-----------|---------|----------|--|-----------|

See accompanying notes to these consolidated financial statements.

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Consolidated Statements of Cash Flows**

|   | <b>December 27,<br/>2008</b> | <b>Year Ended<br/>December 29,<br/>2007</b> | <b>December 30,<br/>2006</b> |
|---|------------------------------|---|------------------------------|
|   | <b>(In thousands)</b>        |   |                              |
| <b>Cash flows from operating activities:</b>                  |                              |   |                              |
| Cash received from customers                                  | \$ 1,203,822                 | \$ 515,994                                  | \$ 110,196                   |
| Cash paid to suppliers and associates                         | (723,123)                    | (276,525)                                   | (111,945)                    |
| Interest received   | 19,138                       | 19,965                                      | 2,640                        |
| Interest paid, net of amounts capitalized                     | (4,629)                      | (2,294)                                     | (712)                        |
| Income taxes paid, net of refunds                             | (1,975)                      | (19,002)                                    |                              |
| Excess tax benefit from share-based compensation arrangements | (28,661)                     | (30,196)                                    | (45)                         |
| Other   | (1,505)                      | (1,991)                                     | (710)                        |
| Net cash provided by (used in) operating activities           | 463,067                      | 205,951                                     | (576)                        |
| <b>Cash flows from investing activities:</b>                  |                              |   |                              |
| Purchases of property, plant and equipment                    | (459,271)                    | (242,371)                                   | (153,150)                    |
| Purchase of marketable securities                             | (334,818)                    | (1,081,154)                                 |                              |
| Proceeds from maturities of marketable securities             | 107,450                      | 787,783                                     |                              |
| Proceeds from sales of marketable securities                  | 418,762                      |   |                              |
| Increase in restricted investments                            | (15,564)                     | (6,008)                                     | (6,804)                      |
| Investment in related party                                   | (25,000)                     |   |                              |
| Acquisitions, net of cash acquired                            |                              | (5,500)                                     |                              |
| Other investments in long-term assets                         |                              |   | (40)                         |
| Net cash used in investing activities                         | (308,441)                    | (547,250)                                   | (159,994)                    |
| <b>Cash flows from financing activities:</b>                  |                              |   |                              |
| Proceeds from issuance of common stock                        |                              | 365,969                                     | 302,650                      |
| Proceeds from notes payable to a related party                |                              |   | 36,000                       |
| Repayment of notes payable to a related party                 |                              |   | (64,700)                     |
| Repayment of long-term debt                                   | (41,691)                     | (34,757)                                    | (135)                        |
| Other equity contributions                                    |                              |   | 30,000                       |
| Proceeds from stock options exercised                         | 16,036                       | 10,173                                      | 100                          |
| Proceeds from issuance of debt, net of issuance costs         | 138,887                      | 49,368                                      | 130,833                      |
| Excess tax benefit from share-based compensation arrangements | 28,661                       | 30,196                                      | 45                           |
| Proceeds from economic development funding                    | 35,661                       | 9,475                                       | 16,766                       |
| Other financing activities                                    | (5)                          | (3)   | (9)                          |
| Net cash provided by financing activities                     | 177,549                      | 430,421                                     | 451,550                      |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|   |            |            |            |
|---|------------|------------|------------|
| Effect of exchange rate changes on cash and cash equivalents                  | (20,221)   | 7,050      | 391        |
| Net increase in cash and cash equivalents                                     | 311,954    | 96,172     | 291,371    |
| Cash and cash equivalents, beginning of year                                  | 404,264    | 308,092    | 16,721     |
| Cash and cash equivalents, end of year  | \$ 716,218 | \$ 404,264 | \$ 308,092 |
| <b>Supplemental disclosure of noncash investing and financing activities:</b> |            |            |            |
| Property, plant and equipment acquisitions funded by liabilities              | \$ 19,449  | \$ 38,320  | \$ 2,304   |
| Non-cash conversion of debt and accrued interest to equity                    |            |            | 74,000     |
| Issuance of common stock for purchase acquisition                             |            | 28,066     |            |

See accompanying notes to these consolidated financial statements.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements**

**Note 1. First Solar and Its Business**

We design, manufacture and sell solar electric power modules, which we produce at our plants in Perrysburg, Ohio, Frankfurt/Oder, Germany and Kulim, Malaysia. First Solar Holdings, LLC was formed as a Delaware limited liability company in May 2003 to act as the holding company for First Solar, LLC which was formed in 1999 and renamed First Solar US Manufacturing, LLC in the second quarter of 2006, and other subsidiaries formed during 2003 and later. On February 22, 2006, First Solar Holdings, LLC was incorporated in Delaware as First Solar Holdings, Inc. and, also during the first quarter of 2006, was renamed First Solar, Inc. Upon our change in corporate organization on February 22, 2006, our membership units became common stock shares and our unit options became share options on a one-for-one basis. For clarity of presentation, we refer to our ownership interests as shares or stock in the remainder of these notes to our consolidated financial statements, although prior to February 22, 2006 they were membership units. First Solar, Inc. has wholly owned subsidiaries in Delaware, Germany, Singapore, Mexico and Malaysia.

On October 30, 2006, our board of directors approved a 4.85 to 1 stock split of our common shares, which was effective November 1, 2006; the par value of our common shares remained \$0.001 per share. All share and per share amounts presented in these consolidated financial statements have been retroactively adjusted to reflect the stock split.

On November 30, 2007, we acquired 100% of the outstanding membership interests of Turner Renewable Energy, LLC for \$6.3 million in cash and 118,346 shares of our common stock. See Note 5 to our consolidated financial statements for more information about this acquisition.

**Note 2. Summary of Significant Accounting Policies**

*Principles of consolidation.* These consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and include the accounts of First Solar, Inc. and all of its subsidiaries. We eliminated all intercompany transactions and balances during consolidation.

*Fiscal periods.* We report the results of our operations using a 52 or 53 week fiscal year, which ends on the Saturday on or before December 31. Fiscal 2008 ended on December 27, 2008; fiscal 2007 ended on December 29, 2007; and fiscal 2006 ended on December 30, 2006; all of these fiscal years included 52 weeks. Our fiscal quarters end on the Saturday closest to the end of the applicable calendar quarter.

*Use of estimates.* The preparation of consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and the accompanying notes. Significant estimates in these consolidated financial statements include allowances for doubtful accounts receivable, inventory write-downs, estimates of future cash flows from and the economic useful lives of long-lived assets, asset impairments, certain accrued liabilities, income taxes and tax valuation allowances, accrued warranty expenses, accrued collection and recycling expense, share-based compensation costs and fair value estimates. Actual results could differ materially from these estimates under different assumptions and conditions.

*Business Combinations.* We account for business acquisitions using the purchase method of accounting and record definite lived intangible assets separate from goodwill. Intangible assets are recorded at their fair value based on estimates as at the date of acquisition. Goodwill is recorded as the residual amount of the purchase price less the fair value assigned to the individual assets acquired and liabilities assumed as of the date of acquisition.

*Goodwill.* Goodwill represents the excess of the purchase price of acquired companies over the estimated fair value assigned to the individual assets acquired and liabilities assumed. We do not amortize goodwill, but instead test goodwill for impairment at least annually in the fourth quarter, and, if necessary, we would record any impairment in accordance with SFAS 142, *Goodwill and Other Intangible Assets*. We will perform an impairment

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

test between scheduled annual tests if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has goodwill is less than its carrying value. In the process of our annual impairment review, we primarily use the income approach methodology of valuation, which includes the discounted cash flow method, and the market approach methodology of valuation, which considers values of comparable businesses, to determine the fair value of our goodwill. Significant management judgment is required in the forecasts of future operating results and the discount rates that we used in the discounted cash flow method of valuation and in the selection of comparable businesses that we used in the market approach.

*Investment in related party.* We may acquire equity investments of another company in an amount that is not sufficient to provide us with significant influence over the investee's operations. If the fair values of these equity investments are not readily determinable, they are not within the scope of the accounting guidance at SFAS 115, *Accounting for Certain Investments in Debt and Equity Securities*, and we account for these equity investments using the cost method of accounting. Under the cost method of accounting, we report these investments at their acquisition cost on our consolidated balance sheet and would only adjust these carrying values if we sell the investments or acquire more, if we receive dividends on the investments, or if the investments become other-than-temporarily impaired.

*Fair Value of Financial Instruments.* The carrying amounts of our financial instruments, including cash and cash equivalents, accounts receivable, economic development funding receivable, restricted investments other than the deposit with the financial services company, accounts payable, income tax payable accrued expenses and short-term debt approximate their fair values due to their short maturities. See Note 11 to our consolidated financial statements for more information about our fair value measurements.

*Foreign currency translation.* The functional currencies of our German and Mexican subsidiaries are their local currency. Accordingly, we apply the period end exchange rate to translate their assets and liabilities and the weighted average exchange rate for the period to translate their revenues, expenses, gains and losses into U.S. dollars. We include the translation adjustments as a separate component of accumulated other comprehensive income within stockholders' equity. The functional currency of our subsidiaries in Malaysia and Singapore is the U.S. dollar, so we do not need to translate their financial statements.

*Cash and cash equivalents.* We consider all highly liquid investments with original or remaining maturities of 90 days or less when purchased to be cash equivalents.

*Marketable securities – current.* Marketable securities with maturities greater than 90 days, but less than one-year at purchase are recorded as marketable securities – current. We have classified our marketable securities as available-for-sale. Such marketable securities are recorded at fair value and unrealized gains and losses are recorded to accumulated other comprehensive income (loss) until realized. Realized gains and losses on sales of all such securities are reported in earnings, computed using the specific identification cost method. All of our available-for-sale marketable securities are subject to a periodic impairment review. We consider our marketable debt securities impaired, when its fair value is less than its carrying cost. Investments identified as being impaired are subject to further review to determine if the investment is other than temporarily impaired, in which case the investment is written down to its impaired value and a new cost basis is established.

*Inventories.* We report our inventories at the lower of cost or market. We determine cost on a first-in, first-out basis and include both the costs of acquisition and the costs of manufacturing in our inventory costs. These costs include direct material, direct labor and fixed and variable indirect manufacturing costs, including depreciation and amortization.

We also regularly review the cost of inventory against its estimated market value and record a lower of cost or market write-down if any inventories have a cost in excess of estimated market value. For example, we regularly evaluate the quantity and value of our inventory in light of current market conditions and market trends and record write-downs for any quantities in excess of demand and for any product obsolescence. This evaluation considers historic usage, expected demand, anticipated sales price, new product development schedules, the effect new



**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

products might have on the sale of existing products, product obsolescence, customer concentrations, product merchantability and other factors. Market conditions are subject to change and actual consumption of our inventory could differ from forecast demand. Our inventories have a long life cycle and obsolescence has not historically been a significant factor in their valuation.

*Deferred project costs.* Deferred project costs represent uninstalled materials we have procured for projects. We recognize these costs as deferred assets until we install the materials. Deferred project costs were \$0.7 million and \$2.6 million as of December 27, 2008 and December 29, 2007, respectively.

*Property, plant and equipment.* We report our property, plant and equipment at cost, less accumulated depreciation. Cost includes the price paid to acquire or construct the assets, including interest capitalized during the construction period and any expenditures that substantially add to the value of or substantially extend the useful life of an existing asset. We expense repair and maintenance costs at the time we incur them.

We compute depreciation expense using the straight-line method over the estimated useful lives of the assets, as presented in the table below. We amortize leasehold improvements over the shorter of their estimated useful lives or the remaining term of the lease.

|  | <b>Useful Lives<br/>in Years</b> |
|--|----------------------------------|
| Buildings  | 40                               |
| Manufacturing machinery and equipment                        | 5 - 7                            |
| Furniture, fixtures, computer hardware and computer software | 3 - 5                            |
| Leasehold improvements                                       | up to 15                         |

*Long-lived assets.* We account for any impairment of our long-lived, tangible assets and definite-lived intangible assets in accordance with SFAS 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. As a result, we assess long-lived assets classified as held and used, including our property, plant and equipment, for impairment whenever events or changes in business circumstances arise that may indicate that the carrying amount of the long-lived asset may not be recoverable. These events would include significant current period operating or cash flow losses associated with the use of a long-lived asset or group of assets combined with a history of such losses, significant changes in the manner of use of assets and significant negative industry or economic trends. We evaluated our long-lived assets for impairment during 2008 and did not note any events or changes in circumstances indicating that the carrying values of material long-lived asset are not recoverable.

*Marketable securities - noncurrent.* Marketable securities with maturities greater than one year are recorded as marketable securities - noncurrent. We have classified our marketable securities as available-for-sale. Such marketable securities are recorded at fair value and unrealized gains and losses are recorded to accumulated other comprehensive income (loss) until realized. Realized gains and losses on sales of all such securities are reported in earnings, computed using the specific identification cost method. All of our available-for-sale marketable securities are subject to a periodic impairment review. We consider our marketable debt securities impaired, when a significant decline in the issuer's credit quality is likely to have a significant adverse effect on the fair value of the investment. Investments

identified as being impaired are subject to further review to determine if the investment is other than temporarily impaired, in which case the investment is written down to its impaired value and a new cost basis is established.

*Economic development funding.* We are eligible for economic development funding from various German governmental entities for certain of our capital expenditures. We record a receivable for these funds when our legal right to them exists and all criteria for receiving the funds have been met. We deduct the amount of the funds from the acquisition costs of the related assets, which will reduce the depreciation expense that we otherwise would have to recognize in future periods. See Note 6 to our consolidated financial statements for a description of this economic development funding.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

*Product warranties.* We provide a limited warranty to the original purchasers of our solar modules for five years against defects in materials and workmanship under normal use and service conditions following the date of sale, and we provide a warranty that the modules will produce at least 90% of their power output rating during the first 10 years following the date of sale and at least 80% of their power output rating during the following 15 years. In resolving claims under both the defects and power output warranties, we have the option of either repairing or replacing the covered module or, under the power output warranty, providing additional modules to remedy the power shortfall. Our warranties are automatically transferred from the original purchaser of our modules to a subsequent purchaser. When we recognize revenue for module sales, we accrue a liability for the estimated future costs of meeting our warranty obligations for those modules. We make and revise this estimate based on the number of solar modules under warranty at customer locations, our historical experience with warranty claims, our monitoring of field installation sites, our in-house testing of our solar modules and our estimated per-module replacement cost.

*Environmental remediation liabilities.* We record environmental remediation liabilities when environmental assessments and/or remediation efforts are probable and the costs can be reasonably estimated. We estimate these costs based on current laws and regulations, existing technology and the most likely method of remediation. We do not discount these costs and we exclude the effects of possible inflation and other economic factors. If our cost estimates result in a range of equally probable amounts, we accrue the lowest amount in the range.

*End of life collection and recycling.* We recognize an expense for the estimated fair value of our future obligations for collecting and recycling the solar modules that we have sold at the time they reach the end of their useful lives. See Note 13 to our consolidated financial statements for further information about this obligation and how we account for it.

*Derivative Instruments.* We recognize derivative instruments on our balance sheet at their fair value. On the date that we enter into a derivative contract, we designate the derivative instrument as a hedge of the fair value of a recognized asset or liability or an unrecognized firm commitment (a fair-value hedge); a hedge of a forecasted transaction or the variability of cash flows that are to be received or paid in connection with a recognized asset or liability (a cash-flow hedge); a foreign currency fair-value or cash-flow hedge; a hedge of a net investment in a foreign operation or a derivative instrument that will not be accounted for using any of the specialized hedge-accounting methods specified in SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*. As of December 27, 2008 and December 29, 2007, all of our derivative instruments were designated either as cash-flow hedges or as derivative instruments not accounted for using hedge-accounting methods.

We record changes in the fair value of a derivative instrument that is highly effective as and that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, in other comprehensive income until our earnings are affected by the variability of cash flows of the hedged transaction (that is, until we record periodic settlements of a variable-rate asset or liability in earnings). We record any hedge ineffectiveness, which represents the amount by which the changes in the fair value of the derivative instrument exceed the variability in the cash flows of the forecasted transaction, in current-period earnings. We also record changes in the fair value of a derivative instrument that is highly effective as and that is designated and qualifies as a foreign-currency cash-flow hedge in other comprehensive income. We report changes in the fair values of derivative instruments not accounted for using hedge-accounting in current-period earnings.

We formally document all relationships between hedging instruments and hedged items, as well as our risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivative instruments that are designated as fair value, cash flow or foreign-currency hedges to specific assets and liabilities on our balance sheet or specific firm commitments or forecasted transactions. We also formally assesses (both at the hedge's inception and on an ongoing basis) whether the derivative instruments that we use in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives are expected to remain highly effective in future periods. When we determine that a

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

derivative instrument is not (or has ceased to be) highly effective as a hedge, we discontinue hedge accounting prospectively, as discussed below.

We discontinue hedge accounting prospectively when one of the following events occurs: we determine that a derivative instrument is no longer effective in offsetting changes in the fair value or cash flows of a hedged item (including hedged items such as firm commitments or forecasted transactions); the derivative instrument expires or is sold, terminated or exercised; we conclude that it is no longer probable that the forecasted transaction will occur; a hedged firm commitment no longer meets the definition of a firm commitment or we determine that designating the derivative instrument as a hedging instrument is no longer appropriate or desired.

If we discontinue hedge accounting because it is no longer probable that the forecasted transaction will occur in the originally expected period, we will retain the gain or loss to date on the derivative instrument in accumulated other comprehensive income and reclassify it into earnings when the forecasted transaction affects earnings. However, if it is probable that a forecasted transaction will not occur by the end of the originally specified time period or within an additional two-month period of time thereafter, we will recognize the gains and losses that were accumulated in other comprehensive income immediately in earnings. In all situations in which we discontinue hedge accounting and the derivative instrument remains outstanding, we will carry the derivative instrument at its fair value on our balance sheet and recognize subsequent changes in its fair value in our current period earnings.

*Revenue recognition.* We sell our products directly to solar power system integrators and operators and recognize revenue when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss have passed to the customer, the sales price is fixed or determinable and collectability of the resulting receivable is reasonably assured. This policy is in accordance with the requirements of SEC Staff Accounting Bulletin No. (SAB) 101, *Revenue Recognition in Financial Statements*, as amended by SAB 104, *Revision of Topic 13 (Revenue Recognition)*. Under this policy, we record a trade receivable for the selling price of our product and reduce inventory for the cost of goods sold when delivery occurs in accordance with the terms of the sales contracts. We do not offer extended payment terms or rights of return for our products.

With our acquisition of Turner Renewable Energy, LLC on November 30, 2007, a portion of our revenues has been derived from long-term contracts that we account for under the provisions of the American Institute of Certified Public Accountants' Statement of Position No. (SOP) 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*. Accordingly, we recognize revenues and estimated profits on performance contracts, which are cost-type or fixed-fee contracts to design and develop solar power systems, under the percentage of completion method of accounting using the cost-to-cost methodology. We use this method because we consider costs incurred to be the best available measure of progress on these contracts. We make estimates of the costs to complete a contract and recognize revenue based on the estimated progress to completion. We periodically revise our profit estimates based on changes in facts, and we will immediately recognize any losses that we may identify on contracts.

Incurred costs include all direct material, labor, subcontractor cost, and those indirect costs related to contract performance, such as indirect labor, supplies and tools. We recognize job material costs as incurred costs when the job materials have been installed. When contracts specify that title to job materials transfers to the customer before installation has been performed, we defer revenue and recognize it upon installation, using the percentage-of-completion method of accounting. We consider job materials to be installed materials when they are

permanently attached or fitted to the solar power systems as required by the engineering design.

Our liability for billings in excess of costs and estimated earnings, which is part of the balance sheet caption Other current liabilities, was \$2.2 million and \$2.1 million as of December 27, 2008 and December 29, 2007, respectively. This liability represents our billings in excess of revenues recognized on our contracts, which results from differences between contractual billing schedules and the timing of revenue recognition under our revenue recognition accounting policies.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

We also have a limited number of revenue arrangements that include multiple deliverables. These are contracts under which we provide design and consulting services for and supply parts and equipment for solar power systems. We follow the guidance in Emerging Issues Task Force Issue No. (EITF) 00-21, *Revenue Arrangements with Multiple Deliverables*, when accounting for these arrangements in order to determine whether they have more than one unit of accounting. According to EITF 00-21, deliverable elements in a revenue arrangement with multiple deliverables are separate units of accounting if the elements have standalone value to the customer, if objective and reliable evidence of the fair value of undelivered elements is available, and if the arrangement does not include a general right of return related to delivered items. We determined that our design and supply arrangements generally consist of two elements that qualify as separate units of accounting, the provision of design and consulting services and the supply of solar power system parts and equipment. We apply the same revenue recognition principles (from SAB 104) as we use for our arrangements for the stand-alone sales of products to the recognition of revenue on the parts and equipment unit of accounting of our multiple deliverable arrangements. We recognize revenue from the design and consulting services unit of accounting using the percentage of completion method in accordance with SOP 81-1.

In accordance with EITF No. 06-3, *How Taxes Collected from Customers and Remitted to Governmental Authorities Should Be Presented in the Income Statement (That Is, Gross versus Net Presentation)*, we present taxes assessed by governmental authorities that are both imposed on and concurrent with specific revenue-producing transactions between us and our customers (such as sales, use and value-added taxes) on a net basis and excluded from revenues.

*Shipping and handling costs.* We classify shipping and handling costs as a component of cost of sales. We record customer payments of shipping and handling costs as a component of net sales.

*Share-based compensation.* We account for share-based compensation arrangements in accordance with SFAS 123 (revised 2004) (SFAS 123(R)), *Share-Based Payments*, which we adopted during the first quarter of the year ended December 31, 2005 using the modified retrospective method of transition. Our significant accounting policies related to share-based compensation arrangements are described at Note 17 to our consolidated financial statements.

*Research and development expense.* We incur research and development costs during the process of researching and developing new products and enhancing our existing products, technologies and manufacturing processes. Our research and development costs consist primarily of compensation and related costs for personnel, materials, supplies, equipment depreciation and consultant and laboratory testing costs. We expense these costs as incurred until the resulting product has been completed and tested and is ready for commercial manufacturing.

We are party to several research grant contracts with the United States federal government under which we receive reimbursements for specified costs incurred for certain of our research projects. We record amounts recoverable from these grants as an offset to research and development expense when the related research and development costs are incurred, which is consistent with the timing of our contractual right to receive the cost reimbursements. We have included grant proceeds of \$0.9 million, \$1.8 million and \$0.9 million as offsets to research and development expense during the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively.

*Production start-up.* Production start-up expense consists primarily of salaries and personnel-related costs and the cost of operating a production line before it has been qualified for full production, including the cost of raw materials for solar modules run through the production line during the qualification phase. It also includes all expenses related to the selection of a new site and the related legal and regulatory costs, to the extent we cannot capitalize the

expenditure.

*Income taxes.* We account for income taxes in accordance with SFAS 109, *Accounting for Income Taxes*, which prescribes the use of the asset and liability method whereby we calculate the deferred tax asset or liability account balances at the balance sheet date using current tax laws and rates in effect. We establish valuation



**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

allowances, when necessary, to reduce deferred tax assets to the extent it is *more likely than not* that such deferred tax assets will not be realized. We do not provide deferred taxes related to the U.S. GAAP basis in excess of the U.S. tax basis in the investment in our foreign subsidiaries to the extent such amounts relate to permanently reinvested earnings and profits of such foreign subsidiaries.

In accordance with SFAS 109, income tax expense includes (i) deferred tax expense, which generally represents the net change in the deferred tax asset or liability balance during the year plus any change in valuation allowances and (ii) current tax expense, which represents the amount of tax currently payable to or receivable from a taxing authority. We only recognize tax benefits related to uncertain tax positions to the extent they satisfy the recognition and measurement criteria under FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes*. Only those uncertain tax positions that are more likely than not of being sustained upon examination satisfy the recognition criteria. For those positions that satisfy the recognition criteria, the amount of tax benefit that we recognize is the largest amount of tax benefit that is more than fifty percent likely of being sustained on ultimate settlement of such uncertain tax position. See Note 19 to our consolidated financial statements for more information about the impact of income taxes on our financial position and results of operations.

*Per share data.* Basic income per share is based on the weighted effect of all common shares outstanding and is calculated by dividing net income by the weighted average number of common shares outstanding during the period. Diluted income per share is based on the weighted effect of all common shares and dilutive potential common shares outstanding and is calculated by dividing net income by the weighted average number of common shares and dilutive potential common shares outstanding during the period.

*Advertising Costs.* Advertising costs are expensed as incurred. Advertising costs during 2008, 2007 and 2006 were \$1.0 million, \$0.6 million and \$0.1 million respectively.

*Comprehensive income.* Our comprehensive income consists of our net income, changes in unrealized gains or losses on derivative instruments that we hold and that qualify as and that we have designated as cash flow hedges and the effects on our consolidated financial statements of translating the financial statements of our subsidiaries that operate in foreign currencies. In addition, other comprehensive income includes unrealized gains or losses on available-for-sale securities, the impact of which has been excluded from net income. We present our comprehensive income (loss) in combined consolidated statements of members /stockholders' equity and comprehensive income. Our accumulated other comprehensive income is presented as a component of equity in our consolidated balance sheets and consists of the cumulative amount of net financial statement translation adjustments, unrealized gains or losses on cash flow hedges and unrealized gains or losses on available for sale marketable securities that we have incurred since the inception of our business.

*Recent accounting pronouncements.* In December 2007, the Financial Accounting Standards Board (FASB) issued SFAS 141R, *Business Combinations*, which replaces SFAS 141. SFAS 141R requires most assets acquired and liabilities assumed in a business combination, contingent consideration and certain acquired contingencies to be measured at their fair value as of the date of the acquisition. SFAS 141R also requires that acquisition-related costs and restructuring costs be recognized separately from the business combination. SFAS 141R will be effective for us for our fiscal year 2009 and therefore will apply to any business combinations that we might enter into after December 27, 2008.

In December 2007, the FASB issued SFAS 160, *Noncontrolling Interests in Consolidated Financial Statements*. SFAS 160 amends previous accounting literature to establish new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. SFAS 160 will become effective for us as of the beginning of fiscal 2009. We do not expect that the adoption of SFAS 160 will have a material impact on our financial position, results of operations or cash flows.

In February 2008, the FASB issued FASB Staff Position No. FAS 157-2 (FSP 157-2), *Effective Date of FASB Statement No. 157*. FSP 157-2 deferred the effective date of SFAS 157 for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

basis, until fiscal years beginning after November 15, 2008. As a result of FSP 157-2, we will adopt SFAS 157 for our nonfinancial assets and nonfinancial liabilities beginning with the first interim period of our fiscal year 2009. We do not expect that the adoption of SFAS 157 for our nonfinancial assets and nonfinancial liabilities will have a material impact on our financial position, results of operations or cash flows.

In March 2008, the FASB issued SFAS 161, *Disclosures About Derivative Instruments and Hedging Activities* an amendment of FASB Statement No. 133. SFAS 161 expands quarterly disclosure requirements in SFAS 133 about an entity's derivative instruments and hedging activities. SFAS 161 is effective for fiscal years beginning after November 15, 2008. We do not expect SFAS 161 will have a material impact on our financial position, results of operations or cash flows.

In May 2008, the FASB issued SFAS 162, *The Hierarchy of Generally Accepted Accounting Principles*. SFAS 162 identifies the sources of accounting principles and a prioritized framework for selecting the principles to be used for preparation of the financial statements of nongovernmental entities that are presented in conformity with U.S. GAAP. SFAS 162 replaces the U.S. GAAP hierarchy specified in the American Institute of Certified Public Accountants (AICPA) Statement on Auditing Standards No. 69, *The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles*. SFAS 162 was effective 60 days following the SEC's approval on September 16, 2008 of the Public Company Oversight Board amendments to remove the U.S. GAAP hierarchy from the auditing standards. As a result, we adopted SFAS 162 in the fourth quarter of our fiscal year 2008. The adoption of SFAS 162 did not have a material impact on our financial position, results of operations or cash flows.

In September 2008, the FASB issued FSP FAS 133-1 and FIN 45-4, *Disclosures About Credit Derivatives and Certain Guarantees*. FSP FAS 133-1 and FIN 45-4 is intended to improve disclosures about credit derivatives by requiring more information about the potential adverse effects of changes in credit risk on the financial position, financial performance and cash flows of the sellers of credit derivatives. FSP FAS 133-1 and FIN 45-4 is effective for fiscal years beginning after November 15, 2008. We do not expect that the adoption of FSP FAS 133-1 and FIN 45-4 will have a material impact on our financial position, results of operations or cash flows.

In September 2008, the FASB ratified EITF No. 08-5, *Issuer's Accounting for Liabilities Measured at Fair Value With a Third-Party Credit Enhancement*. EITF 08-5 provides guidance for measuring liabilities issued with an attached third-party credit enhancement (such as a guarantee). It clarifies that the issuer of a liability with a third-party credit enhancement should not include the effect of the credit enhancement in the fair value measurement of the liability. EITF 08-5 is effective for reporting periods beginning after December 15, 2008, with early adoption allowed. We adopted EITF 08-5 in the fourth quarter of fiscal 2008. Our adoption of EITF 08-5 did not have an impact on our financial position, results of operations or cash flows.

In October 2008, the FASB issued FSP FAS 157-3, *Determining Fair Value of a Financial Asset When the Market for That Asset Is Not Active*. FSP FAS 157-3 provides guidance and illustrates key considerations for determining fair value in markets that are not active. FSP FAS 157-3 is effective upon issuance and must be applied to all periods for which financial statements have not been issued. Our adoption of FSP FAS 157-3 did not have an impact on our financial position, results of operations or cash flows.

In December 2008, the FASB issued FSP SFAS 140-4 and FIN 46(R)-8, *Disclosures by Public Entities (Enterprises) about Transfers of Financial Assets and Interests in Variable Interest Entities*. FSP 140-4 and FIN 46(R)-8 amends

SFAS 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities* and FIN 46(R) *Consolidation of Variable Interest Entities (revised December 2003)* an interpretation of ARB No. 51 to require public entities to provide additional disclosures about transfers of financial assets and their involvement with variable interest entities. FSP 140-4 and FIN 46(R)-8 is effective for the first interim or annual reporting period ending after December 15, 2008. Our adoption of FSP 140-4 and FIN 46(R) did not have a material impact on our financial position, results of operations or cash flows.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

**Note 3. Initial Public Offering and Follow-On Public Offering**

The Securities and Exchange Commission declared our first registration statements effective on November 16, 2006, which we filed on Form S-1 (Registration No. 333-135574) and pursuant to Rule 462(b) (Registration No. 333-138779) under the Securities Act of 1933 in connection with the initial public offering of our common stock. Under these registration statements, we registered 22,942,500 shares of our common stock, including 2,942,500 subject to an underwriter's over-allotment option. We registered 16,192,500 of these shares on our own behalf and 6,750,000 of these shares on behalf of certain of our stockholders, including one of our executive officers. In November 2006, we completed our initial public offering, in which we sold all of these shares that we registered on our behalf and on behalf of the selling stockholders, for an aggregate public offering price of \$458.9 million, which included \$58.9 million from the underwriters' exercise of their over-allotment option. Of the \$458.9 million of total gross proceeds, we received gross proceeds of \$323.9 million, against which we charged \$16.6 million of underwriting discounts and commissions and \$4.6 million of other costs of the offering, resulting in a net increase in our paid-in capital of \$302.7 million. The remaining \$135.0 million of gross proceeds went to selling stockholders; they applied \$8.4 million to underwriting discounts and commissions and received \$126.6 million of the offering proceeds. During the year ended December 29, 2007 we received reimbursement for \$0.2 million of offering costs of our initial public offering. We recorded this reimbursement to our additional paid-in capital.

The Securities and Exchange Commission declared our follow-on registration statement effective on August 9, 2007, which we filed on Form S-1 (Registration No. 333-144714) under the Securities Act of 1933 in connection with the follow-on public offering of our common stock. Under this registration statement, we and certain of our stockholders offered 6,500,000 shares of our common stock, with an aggregate public offering price of \$617.5 million. We registered 4,000,000 of these shares on our behalf and 2,500,000 of these shares on behalf of certain of our stockholders, including certain of our executive officers, two of which are also directors of ours. In addition, a selling stockholder had granted the underwriters the right to purchase up to an additional 975,000 shares of common stock to cover over-allotments.

On August 13, 2007, we completed our follow-on offering in which we sold 4,000,000 shares of our common stock and the selling stockholders sold 2,500,000 shares of our common stock. The sale of shares of our common stock resulted in aggregate gross proceeds of \$380.0 million, \$14.0 million of which we applied to underwriting discounts and commissions. As a result, we received \$366.0 million of the offering proceeds.

**Note 4. Related Party Transactions**

In October 2008, we made an equity investment acquiring preferred stock in a company based in the United States that supplies solar power plants to commercial and residential customers at a total cost of \$25.0 million. This investment represents an ownership of approximately 12% of the voting interest in this company and is our only equity interest in that entity. Since our ownership interest in this company is less than 20% and we do not have significant influence over it, we account for this investment using the cost method of accounting. We performed a valuation assessment and have determined that the carrying value of this investment equals the fair value at December 27, 2008. See Note 11 to our consolidated financial statements for information about the fair value measurement of our investment in a related party.

In the fourth quarter of 2008, we have also entered into a long-term supply contract with this related party that in the aggregate allows for approximately \$0.2 billion in sales from 2009 to 2013. During 2008 we did not have any material revenue transactions with this related party.

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)****Note 5. Business Combination*****Turner Renewable Energy, LLC Acquisition***

On November 30, 2007, we acquired 100% of the outstanding membership interests of Turner Renewable Energy, LLC. The acquisition provided us with solar power project engineering and project management skills that enables us to begin deploying cost effective solar electricity solutions for utility companies seeking to meet renewable energy portfolio standard requirements in markets in the United States. In connection with this acquisition we issued an aggregate of 118,346 shares of our common stock to the members of Turner Renewable Energy, LLC in satisfaction of a portion of the purchase price. The fair value of our common stock issued was determined based on the closing price of our common stock on November 30, 2007. The results of Turner Renewable Energy, LLC have been included in our consolidated results of operations from December 1, 2007.

The total consideration related to the acquisition is as follows (in thousands):

|                              | <b>Shares</b> | <b>Fair Value at<br/>November 30,<br/>2007</b> |
|------------------------------|---------------|--|
| Purchase consideration:      |               |  |
| Cash                         |               | \$ 6,261                                       |
| Common stock                 | 118,346       | 28,066   |
| Exit costs                   |               | 177  |
| Direct transaction costs     |               | 506  |
| Total purchase consideration |               | \$ 35,010                                      |

***Purchase Price Allocation***

Under the purchase method of accounting, we allocated the total purchase price shown in the table above to Turner Renewable Energy, LLC's net tangible and intangible assets based on their estimated fair values as of November 30, 2007. The fair values assigned are based on our estimates and assumptions.

The allocation of the purchase price and the estimated useful lives associated with certain assets on November 30, 2007 was as follows (in thousands):

|                                | <b>Amount</b> | <b>Estimated<br/>Useful Life</b> |
|--------------------------------|---------------|----------------------------------|
| Net liabilities assumed        | \$ (176)      | N.A.                             |
| Customer contracts in progress | 170           | 6 months                         |

|                                |           |           |
|--------------------------------|-----------|-----------|
| Customer contracts not started | 1,620     | 12 months |
| Deferred tax liability         | (53)      | N.A.      |
| Goodwill                       | 33,449    | N.A.      |
| Total purchase consideration   | \$ 35,010 |           |



**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Net tangible assets acquired on November 30, 2007 consisted of the following (in thousands):

|  | <b>Amount</b> |
|--|---------------|
| Cash and cash equivalents                          | \$ 760        |
| Accounts receivable, net                           | 5,511         |
| Inventories  | 2,237         |
| Deferred project costs                             | 4,976         |
| Prepaid expenses and other assets                  | 203           |
| Fixed assets, net                                  | 160           |
| <br>   |               |
| Total assets acquired                              | 13,847        |
| Accounts payable                                   | 3,841         |
| Accrued expenses                                   | 1,560         |
| Billings in excess of costs and estimated earnings | 4,141         |
| Warranty accrual                                   | 349           |
| Line of credit                                     | 4,074         |
| Deferred rent                                      | 58            |
| <br>   |               |
| Total liabilities assumed                          | 14,023        |
| <br>   |               |
| Net liabilities assumed                            | \$ (176)      |

*Acquired identifiable intangible assets.* We determined the fair value attributable to customer contracts (contracts already in progress and contracts not started) using projected cash flow generation from these contracts. We calculated the present value of these projected contracts using a discount rate of 10.7% for contracts already in progress and 12.7% for contracts not started yet. We amortize the fair value of these intangible assets using the percentage of completion method.

*Goodwill.* We allocated \$33.4 million to goodwill, which represents the excess of the purchase price over the fair value of the identifiable net tangible and intangible assets that we acquired from Turner Renewable Energy, LLC. In accordance with SFAS 142, *Goodwill and Other Intangible Assets*, we performed our annual test of our goodwill for impairment in the fourth quarter of the year ended December 27, 2008 and concluded that it was not impaired. \$2.8 million of the goodwill arising from the acquisition from Turner Renewable Energy, LLC is deductible for tax purposes.

**Note 6. Economic Development Funding**

On July 26, 2006, we were approved to receive taxable investment incentives ( *Investitionszuschüsse* ) of approximately 21.5 million (\$30.1 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) from the State of Brandenburg, Germany. These funds will reimburse us for certain costs we incurred building our plant in Frankfurt/Oder, Germany, including costs for the construction of buildings and the purchase of machinery and

equipment. Receipt of these incentives is conditional upon the State of Brandenburg having sufficient funds allocated to this program to pay the reimbursements we claim. In addition, we are required to operate our facility for a minimum of five years and employ a specified number of associates during this period. Our incentive approval expires on December 31, 2009. As of December 27, 2008, we had received cash payments of 20.5 million (\$28.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) under this program, and we had accrued an additional 0.5 million (\$0.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) that we are eligible to receive under this program based on qualifying expenditures that we had incurred through that date. We collected this amount in February of 2009. There were no additional investment incentives that we were eligible to receive under this program.

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

We were eligible to recover up to approximately 23.8 million (\$35.0 million at the balance sheet close rate on December 29, 2007 of \$1.47/ 1.00) of expenditures related to the construction of our plant in Frankfurt/Oder, Germany under the German Investment Grant Act of 2005 ( *Investitionszulagen* ). This act permitted us to claim tax-exempt reimbursements for certain costs we incurred building our plant in Frankfurt/Oder, Germany, including costs for the construction of buildings and the purchase of machinery and equipment. Tangible assets subsidized under this program have to remain in the region for at least five years. In accordance with the administrative requirements of this act, we claimed reimbursement under the Act in conjunction with the filing of our tax returns with the local German tax office during the third quarter of fiscal 2007. In addition, this program expired on December 31, 2006, and we could only claim reimbursement for investments completed by that date. The majority of our buildings and structures and our investment in machinery and equipment were completed by that date. As of December 29, 2007, we had accrued \$34.4 million that we were eligible to receive under this program based on qualifying expenditures that we had incurred through the expiration date. We collected this receivable during 2008.

**Note 7. Cash and Investments**

Cash, cash equivalents and marketable securities consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|   | <b>December 27,<br/>2008</b> | <b>December 29,<br/>2007</b> |
|---|------------------------------|------------------------------|
| Cash and cash equivalents:                                    |                              |                              |
| Cash  | \$ 603,434                   | \$ 157,326                   |
| Cash equivalents:   |                              |                              |
| Federal agency debt   | 38,832                       | 172,246                      |
| Corporate debt securities                                     |                              | 41,304                       |
| Money market mutual fund                                      | 73,952                       | 31,958                       |
| Municipal debt  |                              | 1,430                        |
| <b>Total cash and cash equivalents</b>                        | <b>716,218</b>               | <b>404,264</b>               |
| Marketable securities:  |                              |                              |
| Federal agency debt   | 68,086                       | 94,899                       |
| Foreign agency debt   | 6,977                        |                              |
| Corporate debt securities                                     | 30,538                       | 58,921                       |
| Municipal debt  |                              | 111,579                      |
| <b>Total marketable securities</b>                            | <b>105,601</b>               | <b>265,399</b>               |
| <b>Total cash, cash equivalents and marketable securities</b> | <b>\$ 821,819</b>            | <b>\$ 669,663</b>            |

We have classified our marketable securities as available-for-sale. Accordingly, we record them at fair value and account for net unrealized gains and losses as part of other comprehensive income until realized. We report realized gains and losses on the sale of our marketable securities in earnings, computed using the specific identification method. During the year ended December 27, 2008, we realized \$0.6 million in gains and \$0.4 million in losses on our marketable securities. During the year ended December 29, 2007 and December 30, 2006 we did not realize any gains or losses on our marketable securities. See Note 11 to our consolidated financial statements for information about the fair value measurement of our marketable securities.

All of our available-for-sale marketable securities are subject to a periodic impairment review. We consider our marketable debt securities to be impaired when its fair value is less than its carrying cost. Investments identified as being impaired are subject to further review to determine if the investment is other than temporarily impaired, in which case we write down the investment through earnings to its impaired value and a new cost basis is established.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

We did not identify any of our marketable securities as other-than-temporarily impaired at the fiscal years ended December 27, 2008 and December 29, 2007.

The following table summarizes unrealized gains and losses related to our investments in marketable securities designated as available-for-sale by major security type (in thousands):

|                           |                       | <b>As of December 27, 2008</b> |                                |                             |
|---------------------------|-----------------------|--------------------------------|--------------------------------|-----------------------------|
|                           | <b>Amortized Cost</b> | <b>Gross Unrealized Gains</b>  | <b>Gross Unrealized Losses</b> | <b>Estimated Fair Value</b> |
| Federal agency debt       | \$ 67,813             | \$ 273                         | \$                             | \$ 68,086                   |
| Foreign agency debt       | 6,990                 |                                | 13                             | 6,977                       |
| Corporate debt securities | 30,425                | 129                            | 16                             | 30,538                      |
| Total                     | \$ 105,228            | \$ 402                         | \$ 29                          | \$ 105,601                  |

|                           |                       | <b>As of December 29, 2007</b> |                                |                             |
|---------------------------|-----------------------|--------------------------------|--------------------------------|-----------------------------|
|                           | <b>Amortized Cost</b> | <b>Gross Unrealized Gains</b>  | <b>Gross Unrealized Losses</b> | <b>Estimated Fair Value</b> |
| Federal agency debt       | \$ 94,862             | \$ 39                          | \$ 2                           | \$ 94,899                   |
| Corporate debt securities | 58,954                | 13                             | 46                             | 58,921                      |
| Municipal debt            | 111,486               | 93                             |                                | 111,579                     |
| Total                     | \$ 265,302            | \$ 145                         | \$ 48                          | \$ 265,399                  |

Contractual maturities of our available-for-sale marketable securities as of December 27, 2008 and December 29, 2007 were as follows (in thousands):

|                       |                       | <b>As of December 27, 2008</b> |                                |                             |
|-----------------------|-----------------------|--------------------------------|--------------------------------|-----------------------------|
| <b>Maturity</b>       | <b>Amortized Cost</b> | <b>Gross Unrealized Gains</b>  | <b>Gross Unrealized Losses</b> | <b>Estimated Fair Value</b> |
| One year or less      | \$ 75,856             | \$ 199                         | \$ 13                          | \$ 76,042                   |
| One year to two years | 29,372                | 203                            | 16                             | 29,559                      |

|       |            |        |       |            |
|-------|------------|--------|-------|------------|
| Total | \$ 105,228 | \$ 402 | \$ 29 | \$ 105,601 |
|-------|------------|--------|-------|------------|

| Maturity               | Amortized<br>Cost | As of December 29, 2007      |                               | Estimated<br>Fair<br>Value |
|------------------------|-------------------|------------------------------|-------------------------------|----------------------------|
|                        |                   | Gross<br>Unrealized<br>Gains | Gross<br>Unrealized<br>Losses |                            |
| One year or less       | \$ 150,492        | \$ 88                        | \$ 48                         | \$ 150,532                 |
| One year to five years | 42,051            | 48                           |                               | 42,099                     |
| Five years or more     | 72,759            | 9                            |                               | 72,768                     |
| Total                  | \$ 265,302        | \$ 145                       | \$ 48                         | \$ 265,399                 |

The net unrealized gain of \$0.4 million as of December 27, 2008 and \$0.1 million as of December 29, 2007 on our available-for-sale marketable securities was primarily a result of changes in interest rates. We typically invest in highly-rated securities with low probabilities of default. Our investment policy requires investments to be rated single A or better, limits the types of acceptable investments, limits the concentration as to security holder and limits the duration of the investments. The recent and unprecedented disruption in the current credit markets has had a significant adverse impact on a number of financial institutions. However, as of December 27, 2008, the investments that we held in our marketable securities portfolio have not been materially impacted by the current credit

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

environment and we do not believe that the investments that we hold in our marketable securities portfolio will be materially impacted in the near future.

In accordance with FSP 115-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*, the following table shows gross unrealized losses and fair value for those investments that were in an unrealized loss position as of December 27, 2008 and December 29, 2007, aggregated by investment category and the length of time that individual securities have been in a continuous loss position (in thousands):

|                           | As of December 27, 2008 |           |                      |           |            |       |
|---------------------------|-------------------------|-----------|----------------------|-----------|------------|-------|
|                           | In Loss Position for    |           | In Loss Position for |           | Total      |       |
|                           | Less Than 12 Months     | Greater   | 12 Months or         | Greater   | Estimated  | Gross |
| Estimated                 | Gross                   | Estimated | Gross                | Estimated | Gross      |       |
| Fair                      | Unrealized              | Fair      | Unrealized           | Fair      | Unrealized |       |
| Value                     | Losses                  | Value     | Losses               | Value     | Losses     |       |
| Foreign agency debt       | \$ 6,977                | \$ 13     | \$                   | \$        | \$ 6,977   | \$ 13 |
| Corporate debt securities | 9,088                   | 16        |                      |           | 9,088      | 16    |
| Total                     | \$ 16,065               | \$ 29     | \$                   | \$        | \$ 16,065  | \$ 29 |

|                           | As of December 29, 2007 |           |                      |           |            |       |
|---------------------------|-------------------------|-----------|----------------------|-----------|------------|-------|
|                           | In Loss Position for    |           | In Loss Position for |           | Total      |       |
|                           | Less Than 12 Months     | Greater   | 12 Months or         | Greater   | Estimated  | Gross |
| Estimated                 | Gross                   | Estimated | Gross                | Estimated | Gross      |       |
| Fair                      | Unrealized              | Fair      | Unrealized           | Fair      | Unrealized |       |
| Value                     | Losses                  | Value     | Losses               | Value     | Losses     |       |
| Federal agency debt       | \$ 14,714               | \$ 3      | \$                   | \$        | \$ 14,714  | \$ 3  |
| Corporate debt securities | 39,484                  | 45        |                      |           | 39,484     | 45    |
| Total                     | \$ 54,198               | \$ 48     | \$                   | \$        | \$ 54,198  | \$ 48 |

**Note 8. Consolidated Balance Sheet Details***Accounts receivable, net*

Accounts receivable, net consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|                                 | <b>2008</b> | <b>2007</b> |
|---------------------------------|-------------|-------------|
| Accounts receivable, gross      | \$ 61,703   | \$ 18,170   |
| Allowance for doubtful accounts |             | (5)         |
| Accounts receivable, net        | \$ 61,703   | \$ 18,165   |

***Inventories***

Inventories consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|                   | <b>2008</b> | <b>2007</b> |
|-------------------|-------------|-------------|
| Raw materials     | \$ 103,725  | \$ 22,874   |
| Work in process   | 4,038       | 2,289       |
| Finished goods    | 13,791      | 15,041      |
| Total inventories | \$ 121,554  | \$ 40,204   |



**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)*****Prepaid expenses and other current assets***

Prepaid expenses and other current assets consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|  | <b>2008</b> | <b>2007</b> |
|--|-------------|-------------|
| Prepaid expenses                                   | \$ 6,699    | \$ 5,493    |
| Prepaid supplies                                   | 12,556      | 3,646       |
| Capitalized equipment spares                       | 12,900      | 997         |
| Prepaid taxes current                              | 4           | 13,042      |
| Pending sale of marketable securities              |             | 28,600      |
| Derivative instruments current                     | 34,931      | 104         |
| Other receivable from financial institution        | 10,764(1)   |             |
| Costs and estimated earnings in excess of billings | 114         | 6           |
| Other current assets                               | 12,616      | 12,892      |
| Total prepaid expenses and other current assets    | \$ 90,584   | \$ 64,780   |

(1) Settled subsequent to December 27, 2008.

***Property, plant and equipment***

Property, plant and equipment consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|  | <b>2008</b> | <b>2007</b> |
|--|-------------|-------------|
| Buildings and improvements                       | \$ 137,116  | \$ 44,679   |
| Machinery and equipment                          | 559,566     | 170,125     |
| Office equipment and furniture                   | 22,842      | 7,365       |
| Leasehold improvements                           | 11,498      | 4,046       |
| Depreciable property, plant and equipment, gross | 731,022     | 226,215     |
| Accumulated depreciation                         | (100,939)   | (43,134)    |
| Depreciable property, plant and equipment, net   | 630,083     | 183,081     |
| Land   | 5,759       | 3,046       |
| Construction in progress                         | 206,780     | 243,977     |

Property, plant and equipment, net \$ 842,622      \$ 430,104

Depreciation of property, plant and equipment was \$61.1 million, \$24.8 million and \$10.2 million for the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively.

We incurred interest cost and capitalized a portion of it (into our property, plant and equipment) as follows during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|                           | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|---------------------------|-------------|-------------|-------------|
| Interest cost incurred    | \$ 7,394    | \$ 6,065    | \$ 4,363    |
| Interest cost capitalized | (6,885)     | (3,771)     | (3,340)     |
| Interest expense, net     | \$ 509      | \$ 2,294    | \$ 1,023    |

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)*****Accrued expenses***

Accrued expenses consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|  | <b>2008</b> | <b>2007</b> |
|--|-------------|-------------|
| Product warranty liability – current portion | \$ 4,040    | \$ 2,094    |
| Accrued compensation and benefits            | 32,145      | 21,862      |
| Accrued property, plant and equipment        | 44,115      | 35,220      |
| Accrued inventory                            | 31,438      | 4,811       |
| Accrued utilities and plant services         | 5,100       | 1,771       |
| Accrued subcontractor services and materials | 2,934       |             |
| Accrued taxes – other                        | 6,182       | 348         |
| Other accrued expenses                       | 14,945      | 10,150      |
| Total accrued expenses                       | \$ 140,899  | \$ 76,256   |

***Other current liabilities***

Other current liabilities consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|  | <b>2008</b> | <b>2007</b> |
|--|-------------|-------------|
| Derivative instruments – current                   | \$ 50,733   | \$ 3,579    |
| Billings in excess of costs and estimated earnings | 2,159       | 2,149       |
| Other current liabilities                          | 6,846       | 9,075       |
| Total other current liabilities                    | \$ 59,738   | \$ 14,803   |

**Note 9. Restricted Cash and Investments**

At December 27, 2008, our restricted investments consist of a funding arrangement for our solar module collection and recycling program (see Note 13 to our consolidated financial statements), a debt service reserve account of \$4.2 million for our credit facility with a consortium of banks led by IKB Deutsche Industriebank AG (see Note 14 to our consolidated financial statements) and cash held by a financial institution as collateral for a letter of credit.

We pre-fund our estimated solar module collection and recycling costs at the time of module sale through an agreement with a financial services company. During the years 2028 through 2045, we may elect to commute the agreement and receive back the amounts we have deposited plus a rate of return, which is based on money market rates, less any cost reimbursements that we have already received. At December 27, 2008 and December 29, 2007, the

cumulative amount of deposits made were \$25.8 million (including the investment returns earned through that date) and \$8.9 million, respectively, which we report as a restricted investment on our consolidated balance sheets. We will make additional deposits during 2009, based on our estimates made two months before the deposits are due, of the number of modules that we expect to ship during 2009. At that time, we will also adjust the deposits we made during 2008 for estimated module shipments to the actual number shipped during that year.

At December 27, 2008, the estimated fair value of our deposit with a financial services company is \$13.0 million, which is \$12.8 million less than its carrying value of \$25.8 million. We estimated this fair value in accordance with SFAS 157 using a discounted cash flows approach ( income approach ) and incorporated the credit risk of our counterparty into this measurement. The primary reason that the fair value of this asset is less than its carrying amount is that the discount rates that we used to estimate its fair value exceed the contractual interest rates that we earn on the asset. We have the ability and intent to hold this deposit to maturity, and the deposit is

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

structured so that we must hold it to maturity in order to earn the highest contractual rate of return. We expect that our counterparty will be able to make its contractual payments to us when due and, therefore, have concluded that this asset is not impaired as of December 27, 2008

**Note 10. Derivative Financial Instruments**

As a global company, we are exposed in the normal course of business to interest rate risk and foreign currency risk that could affect our net assets, financial position, results of operations and cash flows. We use derivative instruments to hedge against certain risks, such as these, and we only hold derivative instruments for hedging purposes, not for speculative or trading purposes. Our use of derivative instruments is subject to strict internal controls based on centrally defined, performed and controlled policies and procedures.

Depending on the terms of the specific derivative instruments and market conditions, some of our derivative instruments may be assets and others liabilities at any particular point in time. As required by SFAS 133, we present all of our derivatives at fair value on our balance sheet. Depending on the substance of the hedging purpose for our derivative instruments, we account for changes in the fair value of some of them using cash-flow-hedge accounting pursuant to SFAS 133 and of others by recording the changes in fair value directly to current earnings (so-called economic hedges). These accounting approaches are described in more detail where we discuss our various types of derivative instruments below.

Various classes of risk that we are exposed to in our business and risk management systems using derivative instruments that we apply to them are described below. See Note 11 to our consolidated financial statements for information about the techniques we use to measure the fair value of our derivative instruments.

***Interest Rate Risk***

We use interest rate swap agreements to mitigate our exposure to interest rate fluctuations associated with certain of our debt instruments; we do not use interest rate swap agreements for speculative or trading purposes. We have interest rate swaps with a financial institution that effectively converts to fixed rates the floating variable rate of the Euro Interbank Offered Rate (Euribor) on certain drawdowns taken on the term loan portion of our credit facility with a consortium of banks for financing our German plant. These interest rate swap agreements are required under the credit facility agreement. The total notional value of the interest rate swaps was 39.1 million and 46.0 million (\$54.7 million and \$64.4 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) on December 27, 2008 and December 29, 2007, respectively. As of December 27, 2008 and December 29, 2007, the weighted average interest rate for the interest rate swaps was 4.12%.

The notional amounts of the interest rate swaps are scheduled to decline in correspondence to our scheduled principal payments on the hedged term loan drawdowns. These derivative financial instruments qualified for accounting as cash flow hedges in accordance with SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*, and we designated them as such. As a result, we classified the aggregate fair value of the interest rate swap agreements, which was \$1.4 million, with Other current/noncurrent liabilities on our balance sheet at December 27, 2008. At December 29, 2007, we classified the aggregate fair value of the interest rate swap agreements, which was \$0.6 million, with Other current/noncurrent assets on our balance sheet. We record changes in that fair value in other comprehensive income. We determined that our interest rate swap agreements were highly effective as cash flow

hedges at December 27, 2008 and December 29, 2007.

***Foreign Currency Exchange Risk***

*Cash Flow Exposure*

We expect many of the components of our business to have material future cash flows, including revenues and expenses that are denominated in currencies other than their functional currencies. Our primary cash flow exposures are customer collections and vendor payments. Changes in the exchange rates between our components' functional

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

currencies and the other currencies in which they transact will cause fluctuations in the cash flows we expect to receive when these cash flows are realized or settled. Accordingly, we enter into foreign exchange forward contracts to hedge the value of a portion of these forecasted cash flows. As of December 27, 2008, these foreign exchange contracts hedge our future cash flows for up to 12 months. These foreign exchange contracts qualified for accounting as cash flow hedges in accordance with SFAS 133, and we designated them as such. We initially report the effective portion of the derivative's gain or loss in accumulated other comprehensive income (loss) and subsequently reclassify amounts into earnings when the hedged transaction is settled. We determined that these derivative financial instruments were highly effective as cash flow hedges at December 27, 2008 and December 29, 2007. In addition, during 2008 we did not discontinue any cash flow hedges because it was probable that a forecasted transaction would not occur.

During 2008 and 2007, we purchased forward contracts to hedge the exchange risk on forecasted cash flows denominated in euro. As of December 27, 2008, the unrealized loss of these forward contracts was \$15.5 million and the total notional value of the forward contracts was 625.1 million (\$875.1 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). The weighted average forward exchange rate for these contracts is \$1.37/ 1.00. As of December 29, 2007, the unrealized loss of these forward contracts was \$3.2 million and the total notional value of the forward contracts was 112.8 million (\$157.9 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). The weighted average forward exchange rate for these contracts was \$1.44/ 1.00.

We expect to reclassify \$15.5 million of net losses related to these forward contracts that are included in accumulated other comprehensive at December 27, 2008 to earnings in the following 12 months as we realize the earnings effects of the related forecasted revenue transactions. The amount we ultimately record to earnings will be contingent upon the actual exchange rate when we realize the related forecasted transaction; and therefore, the unrealized loss at December 27, 2008 could change. During 2008 we realized a gain of \$17.2 million related to our cash flow hedges.

*Transaction Exposure*

Many components of our business have assets and liabilities (primarily receivables, investments and accounts payable, including inter-company balances) that are denominated in currencies other than their functional currencies. Changes in the exchange rates between our components' functional currencies and the currencies in which these assets and liabilities are denominated can create fluctuations in our reported consolidated financial position, results of operations and cash flows. We may enter into foreign exchange forward contracts or other financial instruments to hedge these assets and liabilities against the short-term effects of currency exchange rate fluctuations. The gains and losses on the foreign exchange forward contracts will offset all or part of the transaction gains and losses that we recognize in earnings on the related foreign currency receivables, investments and payables.

During 2008 and 2007, we purchased forward foreign exchange contracts to hedge balance sheet exposure related to transactions with third parties. We recognize gains or losses from the fluctuation in foreign exchange rates and the valuation of these hedging contracts in foreign currency gain (loss) on our consolidated statements of operations. As of December 27, 2008, the total notional value of foreign exchange contracts to purchase euros with U.S. dollars was 175.2 million (\$245.3 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); the total notional value of foreign exchange contracts to sell euros for U.S. dollars was 123.0 million (\$172.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and the total notional value of foreign exchange contracts to purchase Malaysian ringgit with U.S. dollars was MYR 148.0 million (\$42.9 million at the balance sheet close rate on

December 27, 2008 of \$0.29/MYR1.00). As of December 27, 2008, the unrealized loss of these forward contracts was \$0.8 million. These foreign exchange forward contracts have maturities of 24 months or less. As of December 29, 2007, we had a single outstanding foreign exchange contract to sell 20.0 million (\$26.8 million at a fixed exchange rate of \$1.34/ 1.00). Unrealized losses recorded on this contract at December 29, 2007 were \$2.5 million.



**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

***Credit Risk***

We have certain financial and derivative instruments that potentially subject us to credit risk. These consist primarily of cash, cash equivalents, investments, trade accounts receivable, interest rate swap agreements and forward foreign exchange 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, marketable securities, interest rate swap agreements and forward foreign exchange contracts with various high-quality financial institutions and limit the amount of credit risk from any one counterparty. We continuously evaluate the credit standing of our counterparty financial institutions.

In addition, we have certain restricted investments, which are exposed to credit risk. These consist primarily of restricted investments, which are held by a financial services company to fund our estimated future product collection and recycling costs. As of December 27, 2008 our restricted investments with a subsidiary of this financial services company were \$25.8 million. In October 2008, we entered into credit default swaps (CDS) with J.P. Morgan Chase NA, New York to protect our investment from a significant pre-defined credit event related to the parent financial services company. Under a CDS, a third party assumes for a fee, a portion of the credit risk related to the investment. The CDS we entered into provide protection for losses in the event of a pre-defined credit event of the parent financial services company up to \$25.0 million. At December 27, 2008 the fair value of these CDS was \$0.9 million and we had recorded gains related to fair value adjustments of \$0.6 million. These CDS expire on March 20, 2009 and June 20, 2009, respectively.

**Note 11. Fair Value Measurement**

On December 30, 2007, the beginning of our fiscal year 2008, we adopted SFAS 157. SFAS 157 defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles and expands financial statement disclosure requirements for fair value measurements. Our adoption of SFAS 157 was limited to our financial assets and financial liabilities, as permitted by FSP 157-2. We do not have any nonfinancial assets or nonfinancial liabilities that we recognize or disclose at fair value in our financial statements on a recurring basis. The implementation of the fair value measurement guidance of SFAS 157 did not result in any material changes to the carrying values of our financial instruments on our opening balance sheet on December 30, 2007 for fiscal year 2008.

SFAS 157 defines fair value as the price that would be received from the sale of an asset or paid to transfer a liability (an exit price) on the measurement date in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. SFAS 157 specifies a hierarchy of valuation techniques, which is based on whether the inputs into the valuation technique are observable or unobservable. The hierarchy is as follows:

Level 1 Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

Level 2 Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs and significant value drivers are observable in

active markets are Level 2 valuation techniques.

Level 3 Valuation techniques in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are valuation technique inputs that reflect our own assumptions about the assumptions that market participants would use in pricing an asset or liability.

When available, we use quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, we measure fair value using valuation techniques that use, when possible, current

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

market-based or independently-sourced market parameters, such as interest rates and currency rates. Following is a description of the valuation techniques that we use to measure the fair value of assets and liabilities that we measure and report on our balance sheet at fair value on a recurring basis:

*Cash Equivalents.* As of December 27, 2008, our cash equivalents consisted of federal agency debt and money market mutual funds. We value our cash equivalents using observable inputs that reflect quoted prices for securities with identical characteristics, and accordingly, we classify the valuation techniques that use these inputs as Level 1. We also have cash equivalents which we value using other observable inputs (such as interest rates that are quoted observable at commonly quoted intervals) and accordingly, we classify the valuation techniques that use these inputs as Level 2. We consider the effect of our counterparties' credit standings in our valuations of our marketable securities holdings.

*Marketable securities.* As of December 27, 2008, our marketable securities consisted of federal and foreign agency debt and corporate debt securities. We value our marketable securities using quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals), and accordingly, we classify the valuation techniques that use these inputs as Level 2. We also consider the effect of our counterparties' credit standings in these fair value measurements.

*Derivative assets and liabilities.* Our derivative assets and liabilities consist of foreign exchange forward contracts involving major currencies, interest rate swaps involving a benchmark interest rate and credit default swaps. Since our derivative assets and liabilities are not traded on an exchange, we value them using valuation models. Interest rate yield curves, foreign exchange rates and credit default swap spreads are the significant inputs into these valuation models. These inputs are observable in active markets over the terms of the instruments we hold, and accordingly, we classify these valuation techniques as Level 2 in the hierarchy. We consider the effect of our own credit standing and that of our counterparties in our valuations of our derivative financial instruments.

As of December 27, 2008, information about inputs into the fair value measurements of our assets and liabilities that are measured at fair value on a recurring basis in periods subsequent to their initial recognition is as follows (in thousands):

| <b>Total Fair<br/>Value and<br/>Carrying<br/>Value on Our<br/>Balance Sheet</b> | <b>Fair Value Measurements at Reporting<br/>Date Using</b>  |  |  |
|---|---|--|--|
|   | <b>Quoted<br/>Prices<br/>in Active<br/>Markets<br/>for<br/>Identical<br/>Assets<br/>(Level 1)</b> | <b>Significant<br/>Other<br/>Observable<br/>Inputs<br/>(Level 2)</b> | <b>Significant<br/>Unobservable<br/>Inputs<br/>(Level 3)</b> |

Assets:

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|                           |    |         |           |               |
|---------------------------|----|---------|-----------|---------------|
| Cash equivalents:         |    |         |           |               |
| Federal agency debt       | \$ | 38,832  | \$        | \$ 38,832 \$  |
| Money market mutual funds |    | 73,952  | 73,952    |               |
| Marketable securities:    |    |         |           |               |
| Federal agency debt       |    | 68,086  |           | 68,086        |
| Foreign agency debt       |    | 6,977   |           | 6,977         |
| Corporate debt securities |    | 30,538  |           | 30,538        |
| Derivative assets         |    | 34,931  |           | 34,931        |
| <br>                      |    |         |           |               |
| Total assets              | \$ | 253,316 | \$ 73,952 | \$ 179,364 \$ |
| <br>                      |    |         |           |               |
| Liabilities:              |    |         |           |               |
| Derivative liabilities    | \$ | 51,787  | \$        | \$ 51,787 \$  |

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)*****Fair Value of Financial Instruments***

The carrying amounts and fair values of our financial instruments at December 27, 2008 and December 29, 2007 are as follows (in thousands):

|   | 2008           |            | 2007           |            |
|---|----------------|------------|----------------|------------|
|   | Carrying Value | Fair Value | Carrying Value | Fair Value |
| Assets:   |                |            |                |            |
| Marketable securities, current and noncurrent                   | \$ 105,601     | \$ 105,601 | \$ 265,399     | \$ 265,399 |
| Deposit with financial services company (restricted investment) | \$ 25,841      | \$ 13,039  | \$ 8,915       | \$ 8,915   |
| Investment in related party                                     | \$ 25,000      | \$ 25,000  | \$             | \$         |
| Credit default swaps  | \$ 896         | \$ 896     | \$             | \$         |
| Interest rate swaps   | \$             | \$         | \$ 604         | \$ 604     |
| Foreign exchange forward contract assets                        | \$ 34,035      | \$ 34,035  | \$             | \$         |
| Liabilities:  |                |            |                |            |
| Long-term debt, including current maturities                    | \$ 198,470     | \$ 204,202 | \$ 83,692      | \$ 83,692  |
| Interest rate swaps   | \$ 1,377       | \$ 1,377   | \$             | \$         |
| Foreign exchange forward contract liabilities                   | \$ 50,410      | \$ 50,410  | \$ 5,646       | \$ 5,646   |

The carrying values on our balance sheet of our cash and cash equivalents, accounts receivable, economic development funding receivable, restricted investments other than the deposit with the financial services company, accounts payable, income tax payable, accrued expenses and short-term debt approximate their fair values due to their short maturities, so we exclude them from the table above.

Our methods for estimating the fair values of our derivative assets and liabilities are disclosed in a previous section of this Note. We estimated the fair values of our deposit asset and long-term debt in accordance with SFAS 157 using a discounted cash flows approach ( income approach ) and incorporated the credit risk of our counterparty for the asset measurement and our credit risk for the liability measurement.

**Note 12. Goodwill and Intangible Assets*****Goodwill***

On November 30, 2007, we acquired 100% of the outstanding membership interests of Turner Renewable Energy, LLC. Under the purchase method of accounting, we allocated \$33.4 million to goodwill through December 29, 2007, which represents the excess of the purchase price over the fair value of the identifiable net tangible and intangible assets of Turner Renewable Energy, LLC.

The changes in the carrying amount of goodwill for the year ended December 27, 2008 are as follows (in thousands):

|                                 |           |
|---------------------------------|-----------|
| Balance as of December 29, 2007 | \$ 33,449 |
| Goodwill adjustments            | 380       |
| Balance as of December 27, 2008 | \$ 33,829 |

The goodwill adjustment of \$0.4 million, which we made during 2008, was primarily the result of adjustments made to the opening balance sheet for acquisition-related intangible assets and related deferred taxes.

SFAS 142, *Goodwill and Other Intangible Assets* requires us to test goodwill for impairment at least annually or sooner if facts or circumstances between scheduled annual tests indicate that it is more likely than not that the fair

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

value of reporting unit that has goodwill might be less than its carrying value. We perform our goodwill impairment tests in the fourth fiscal quarter. Based on our test for goodwill impairment in the fourth quarter of 2008, we concluded that our goodwill was not impaired. We also concluded that there were no changes in facts and circumstances that indicated that our goodwill might be impaired at December 27, 2008.

***Acquisition Related Intangible Assets***

In addition, with the acquisition of Turner Renewable Energy, LLC in November 2007, we identified two intangible assets, which represent customer contracts already in progress at the time of acquisition and future customer contracts not yet started. We amortize the acquisition date fair values of these assets using the percentage of completion method.

Information regarding our acquisition-related intangible assets that are being amortized is as follows (in thousands):

|  | <b>As of December 29, 2007</b>       |                                     |                                   |
|--|--------------------------------------|-------------------------------------|-----------------------------------|
|  | <b>Gross<br/>Carrying<br/>Amount</b> | <b>Accumulated<br/>Amortization</b> | <b>Net<br/>Carrying<br/>Value</b> |
| Customer contracts in progress at the acquisition date | \$ 170                               | \$ 28                               | \$ 142                            |
| Customer contracts executed after the acquisition date | 1,620                                |                                     | 1,620                             |
| Total  | \$ 1,790                             | \$ 28                               | \$ 1,762                          |

During 2008, we concluded that the carrying amount of certain customer intangible assets would not be realized due to our not pursuing certain projects that did not fit our overall business strategy. We recognized the resulting impairment loss of \$1.3 million in cost of sales.

|  | <b>As of December 27, 2008</b>       |                                     |                                   |
|--|--------------------------------------|-------------------------------------|-----------------------------------|
|  | <b>Gross<br/>Carrying<br/>Amount</b> | <b>Accumulated<br/>Amortization</b> | <b>Net<br/>Carrying<br/>Value</b> |
| Customer contracts in progress at the acquisition date | \$ 62                                | \$ 58                               | \$ 4                              |
| Customer contracts executed after the acquisition date | 394                                  | 242                                 | 152                               |
| Total  | \$ 456                               | \$ 300                              | \$ 156                            |

Amortization expense for acquisition-related intangible assets was \$0.3 million for the year ended December 27, 2008. We expect to amortize the remaining balance of our acquisition related intangible assets during 2009.

***Other Intangible Assets***

Included in other noncurrent assets on our consolidated balance sheets are internally-generated intangible assets, substantially all of which are patents on technologies related to our products and production processes. We record an asset for patents based on the legal, filing and other costs incurred to secure them and amortize these costs on a straight-line basis over estimated useful lives ranging from 4 to 20 years. These intangible assets have a weighted-average useful life of approximately nine years.



**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Amortization expense for our patents was \$0.1 million for the year ended December 27, 2008 and was less than \$0.1 million for each of the years ended December 29, 2007 and December 30, 2006. These intangible assets consisted of the following at December 27, 2008 and December 29, 2007 (in thousands):

|                          | <b>2008</b> | <b>2007</b> |
|--------------------------|-------------|-------------|
| Intangible assets, gross | \$ 1,472    | \$ 1,472    |
| Accumulated amortization | (1,199)     | (1,174)     |
| Intangible assets, net   | \$ 273      | \$ 298      |

Estimated future amortization expense for our patents is as follows at December 27, 2008 (in thousands):

|            |        |
|------------|--------|
| 2009       | \$ 25  |
| 2010       | \$ 25  |
| 2011       | \$ 25  |
| 2012       | \$ 25  |
| 2013       | \$ 25  |
| Thereafter | \$ 148 |

**Note 13. Product Collection and Recycling Liability**

Legislative initiatives in Europe hold manufacturers responsible for the collection and recycling of certain electrical products. The legislation passed to date does not include solar modules. However, based on our commitment to the environment, we determined in the fourth quarter of 2004 that we should develop a program for ensuring the collection and recycling of the modules that we sell worldwide. As a result, we began to include a solar module collection and recycling arrangement in our 2005 standard sales contracts, into which our customers – which are solar power project developers and system integrators and operators – can enroll the eventual system owners. Under this arrangement, we agree to provide for the collection and recycling of the materials in our solar modules and the system owners agree to notify us, disassemble their solar power systems, package the solar modules for shipment and revert ownership rights over the modules back to us at the end of the modules' expected service lives.

At December 27, 2008 and December 29, 2007, we have recorded accrued collection and recycling liabilities for the estimated fair value of our obligations for the collection and recycling of our solar modules and we have made associated charges to cost of sales. We based our estimate of the fair value of our collection and recycling obligations on the present value of the expected future cost of collecting and recycling the modules, which includes the cost of packaging the modules for transport, the cost of freight from the module installation sites to a recycling center and the material, labor, and capital costs of the recycling process. We based this estimate on our experience collecting and recycling our solar modules and on our expectations about future developments in recycling technologies and processes and about economic conditions at the time the modules will be collected and recycled. In the periods between the time of our sales and our settlement of the collection and recycling obligations, we accrete the carrying

amount of the associated liability by applying the discount rate used for its initial measurement. Our module end-of-life collection and recycling liabilities totaled \$35.2 million at December 27, 2008 and \$13.1 million at December 29, 2007. We charged \$22.2 million, \$8.9 million and \$2.5 million to cost of sales for the fair value of our collection and recycling obligation for modules sold during the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively. The accretion expense on our collection and recycling obligations was \$0.9 million and \$0.3 million during the years ended December 27, 2008 and December 29, 2007, respectively, and during the year ended December 30, 2006 the expense was insignificant.

Starting in the first quarter of 2005, we also offered participation in the solar module collection and recycling program to owners of the 164,000 modules that we sold during 2003 and 2004, at no charge to the owners. When

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

owners enroll in the program, we record liabilities for the estimated fair value of our obligations for the collection and recycling of the solar modules, with an associated charge to cost of sales. We estimate the fair value of our obligation and account for the subsequent accretion the same way as for our obligation for solar modules sold from 2005 through 2008. During the years ended December 27, 2008 and December 29, 2007, the charge to cost of sales for modules sold during 2003 and 2004 was insignificant. During the year ended December 30, 2006, we charged \$0.3 million to cost of sales for the fair value of the obligations incurred during that year for modules sold during 2003 and 2004. If all owners participated as of December 27, 2008, we estimate that the fair value of our obligation would be \$0.5 million.

**Note 14. Debt**

Our long-term debt at December 27, 2008 and December 29, 2007 consisted of the following (in thousands):

|  | <b>December 27,<br/>2008</b> | <b>December 29,<br/>2007</b> |
|--|------------------------------|------------------------------|
| Euro denominated loan, variable interest Euribor plus 1.6%, due 2008 through 2012  | \$ 54,982                    | \$ 67,761                    |
| 2.25% loan, due 2006 through 2015  | 11,694                       | 13,226                       |
| 0.25% 3.25% loan, due 2007 through 2009  | 1,528                        | 3,334                        |
| Euro denominated loan, variable interest Euribor plus 0.55%, due 2008 through 2016 | 66,975                       |                              |
| Euro denominated 4.54% loan, due 2008 through 2016                                 | 66,975                       |                              |
| Capital lease obligations  | 5                            | 9                            |
|  | 202,159                      | 84,330                       |
| Less unamortized discount  | (3,689)                      | (638)                        |
| Total long-term debt   | 198,470                      | 83,692                       |
| Less current portion   | 34,951                       | 14,836                       |
| Noncurrent portion   | \$ 163,519                   | \$ 68,856                    |

We had outstanding borrowings of \$24.5 million at December 29, 2007, which we classified as short-term debt. In February 2008, we repaid the full amount of our short-term debt, which related to our bridge loan with a consortium of banks. As of December 27, 2008, we did not have any short-term debt.

On May 6, 2008, in connection with the plant expansion at our Malaysian manufacturing center, First Solar Malaysia Sdn. Bhd. (FS Malaysia), our indirect wholly owned subsidiary entered into an export financing facility agreement (Facility Agreement) with IKB Deutsche Industriebank AG (IKB) as arranger NATIXIS Zweigniederlassung Deutschland (NZD) as facility agent and original lender, AKA Ausfuhrkredit-Gesellschaft mbH (AKA), as original lender and NATIXIS Labuan Branch (NLB) as security agent. Pursuant to the terms of the Facility Agreement, the lenders will furnish up to 134.0 million (\$187.6 million at the balance sheet close rate on December 27, 2008 of

\$1.40/ 1.00) of credit facilities consisting of the following:

(1) Five fixed-rate euro-denominated term loan facilities, which have the following maximum aggregate amounts:

a) 16.9 million (\$23.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);

b) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

- c) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
  - d) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
  - e) 1.2 million (\$1.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and
- (2) Five floating-rate euro-denominated term loan facilities, which have the following maximum aggregate amounts:
- a) 16.9 million (\$23.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
  - b) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
  - c) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00);
  - d) 16.3 million (\$22.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00); and
  - e) 1.2 million (\$1.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00).

The loans under the fixed rate credit facilities bear interest on the outstanding unpaid principal amount at an annual rate of 4.54%. The loans under the floating rate credit facilities bear interest on the outstanding unpaid principal amount at Euribor plus a margin of 0.55%.

These credit facilities are intended to be used by FS Malaysia for the purpose of (1) partially financing the purchase of certain equipment to be used at our Malaysian manufacturing center and (2) financing fees to be paid to Euler-Hermes Kreditversicherungs-AG (Euler-Hermes), the German Export Credit Agency of Hamburg, Federal Republic of Germany, which will guaranty 95% of FS Malaysia's obligations related to the Facility Agreement (Hermes Guaranty). In addition, FS Malaysia's obligations related to the Facility Agreement are guaranteed, on an unsecured basis, by First Solar, Inc., pursuant to a guaranty agreement described below.

The Facility Agreement requires FS Malaysia to make 14 equal semi-annual repayments of the total principal borrowed under each of the credit facilities listed above. The first of these repayments commences on the earlier of (1) the day that is nine months after the date that the Malaysian manufacturing center plant to which the credit facility relates becomes ready for operation and (2) a date specified for each credit facility, the earliest of which is September 30, 2008 for the credit facilities listed as (1) a) and (2) a) above. Principal repayments commenced on September 30, 2008.

FS Malaysia may voluntarily cancel commitments of the credit facilities and may make prepayments of amounts outstanding in whole or in part, subject to minimum prepayment requirements and the payment of break costs. Subject to a limited exception, in the event that the Euler-Hermes Guaranty is (1) fully or partially withdrawn, or otherwise ceases to be in full force and effect or (2) repudiated by Euler-Hermes (or its intention to repudiate is evidenced in writing), or if any of the obligations of Euler-Hermes under the Euler-Hermes Guaranty ceases to be legal, valid, binding or in full force and effect, the loans made by any lender under any of the credit facilities may, at the direction of the lender, be declared immediately due and payable.

FS Malaysia is obligated to pay commitment fees at an annual rate of 0.375% on the unused portions of the fixed rate credit facilities and at an annual rate of 0.350% on the unused portions of the floating rate credit facilities. In addition, FS Malaysia is obligated to pay certain underwriting, management and agency fees in connection with the credit facilities.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

In connection with the Facility Agreement, First Solar, Inc. entered into a first demand guaranty agreement dated May 6, 2008 in favor of IKB, NZD, NLB and the other lenders under the Facility Agreement. As stated above, FS Malaysia's obligations related to the Facility Agreement are guaranteed, on an unsecured basis, by First Solar pursuant to this guaranty agreement.

In connection with the Facility Agreement, all of FS Malaysia's obligations related to the Facility Agreement are secured by a first party, first legal charge over the equipment financed by the credit facilities and the other documents, contracts and agreements related to that equipment. Also in connection with the Facility Agreement, any payment claims of First Solar, Inc. against FS Malaysia are subordinated to the claims of IKB, NZD, NLB and the other lenders under the Facility Agreement.

The Facility Agreement contains various financial covenants with which we must comply with, such as debt to equity ratios, total leverage ratios, interest coverage ratios and debt service coverage ratios. We must submit these ratios related to the financial covenants for the first time at the end of fiscal 2009. The Facility Agreement also contains various customary non-financial covenants which FS Malaysia must comply with, including, submitting various financial reports and business forecasts to the lenders, maintaining adequate insurance, complying with applicable laws and regulations, restrictions on FS Malaysia's ability to sell or encumber assets and make loan guarantees to third parties. We were in compliance with these covenants through December 27, 2008.

As of December 27, 2008, we had outstanding borrowings of \$93.3 million (\$130.6 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) under the Facility Agreement.

On July 27, 2006, First Solar Manufacturing GmbH, a wholly owned indirect subsidiary of First Solar, Inc., entered into a credit facility agreement with a consortium of banks led by IKB Deutsche Industriebank AG under which we could draw up to \$102.0 million (\$142.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) to fund costs of constructing and starting up our German plant. This credit facility consisted of a term loan of up to \$53.0 million (\$74.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) and a revolving credit facility of \$27.0 million (\$37.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). The facility also provided for a bridge loan, which we drew against to fund construction costs that were later reimbursed through funding from the Federal Republic of Germany under the Investment Grant Act of 2005 (*Investitionszulagen*), of up to \$22.0 million (\$30.8 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00). We can no longer make drawdowns against the term loan and the bridge loan but we can make drawdowns against the revolving credit facility until September 30, 2012. We incurred costs related to the credit facility totaling \$2.2 million through December 29, 2007, which we recognized as interest and other financing expenses over the time that the borrowings were outstanding under the credit facility. We did not incur any costs related to the credit facility during fiscal 2008. We also pay an annual commitment fee of 0.6% of any amounts available but not drawn down on the credit facility.

At December 27, 2008, we had outstanding borrowings of \$55.0 million under the term loan, \$42.0 million of which we classify as long-term debt and \$13.0 million of which we classify as current portion of long-term debt. We had no outstanding borrowings under the bridge loan at December 27, 2008. We repaid the bridge loan in February 2008 with funding we received from the Federal Republic of Germany under the Investment Grant of 2005 and we cannot make any more draws against the bridge loan facility. We also had no outstanding borrowings under the revolving credit facility at December 27, 2008. At December 27, 2008 and December 29, 2007, interest rates were 6.7% and 6.3%, respectively, for the term loan; however, on January 1, 2009, the interest rate reset to 4.6%.

We must repay the term loan in twenty quarterly payments beginning on March 31, 2008 and ending on December 31, 2012. Once repaid, we may not draw again against the term loan facility. The revolving credit facility expires on and must be completely repaid by December 31, 2012. In certain circumstances, we must also use proceeds from fixed asset sales or insurance claims to make additional principal payments.

We pay interest at the annual rate of the Euro interbank offered rate (Euribor) plus 1.6% on the term loan and Euribor plus 1.8% on the revolving credit facility. Each time we make a draw against the revolving credit facility, we



**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

may choose to pay interest on that drawdown every one, three, or six months. The credit facility requires us to mitigate our interest rate risk on the term loan by entering into pay-fixed, receive-floating interest rate swaps covering at least 75% of the balance outstanding under the term loan.

The Federal Republic of Germany is guaranteeing 48% of our combined borrowings on the term loan and revolving credit facility and the State of Brandenburg is guaranteeing another 32%. We pay an annual fee, not to exceed 0.5 million (\$0.7 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) for these guarantees. In addition, we must maintain a debt service reserve of 3.0 million (\$4.2 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) in a restricted investment account, which the lenders may access if we are unable to make required payments on the credit facility. Substantially all of our assets in Germany, including the German plant, have been pledged as collateral for the credit facility and the government guarantees.

The credit facility contains various financial covenants with which we must comply. First Solar Manufacturing GmbH's cash flow available for debt service must be at least 1.1 times its required principal and interest payments for all its liabilities and the ratio of its total noncurrent liabilities to earnings before interest, taxes, depreciation and amortization may not exceed 3.0:1 from January 1, 2008, through December 31, 2008, 2.5:1 from January 1, 2009 through December 31, 2009 and 1.5:1 from January 1, 2010 through the remaining term of the credit facility.

The credit facility also contains various non-financial covenants with which we must comply. We must submit various financial reports, financial calculations and statistics, operating statistics and financial and business forecasts to the lender. We must adequately insure our German operation, and we may not change the type or scope of its business operations. First Solar Manufacturing GmbH must maintain adequate accounting and information technology systems. Also, First Solar Manufacturing GmbH cannot open any bank accounts (other than those required by the credit facility), sell any assets to third parties outside the normal course of business, make any loans or guarantees to third parties, or allow any of its assets to be encumbered to the benefit of third parties without the consent of the lenders and government guarantors. We were in compliance with these covenants through December 27, 2008.

Our ability to withdraw cash from First Solar Manufacturing GmbH for use in other parts of our business is restricted while we have outstanding obligations under the credit facility and associated government guarantees. First Solar Manufacturing GmbH generally cannot make any payments to affiliates if doing so would cause its cash flow available for debt service to fall below 1.3 times its required principal and interest payments for all its liabilities for any one year period or cause the amount of its equity to fall below 30% of the amount of its total assets. First Solar Manufacturing GmbH also cannot pay commissions of greater than 2% to First Solar affiliates that sell or distribute its products. Furthermore, we may be required under certain circumstances to contribute more funds to First Solar Manufacturing GmbH, such as if all or part of the government guarantees are withdrawn.

During the year ended December 31, 2005, we received a \$15.0 million loan from the Director of Development of the State of Ohio, \$11.7 million of which was outstanding at December 27, 2008. Interest is payable monthly at the annual rate of 2.25%; principal payments commenced on December 1, 2006 and end on July 1, 2015. Land and buildings at our Ohio plant with a net book value of \$21.1 million at December 27, 2008 have been pledged as collateral for this loan.

During the year ended December 25, 2004, we received a \$5.0 million loan from the Director of Development of the State of Ohio, of which \$1.5 million was outstanding at December 27, 2008. Interest is payable monthly at annual

rates starting at 0.25% during the first year the loan is outstanding, increasing to 1.25% during the second and third years, increasing to 2.25% during the fourth and fifth years and increasing to 3.25% for each subsequent year; principal payments commenced on January 1, 2007 and end on December 1, 2009. Machinery and equipment at our Ohio plant with a net book value of \$7.7 million at December 27, 2008 have been pledged as collateral for this loan.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

At December 27, 2008, future principal payments on our long-term debt, excluding payments related to capital leases, which are disclosed in Note 15 to our consolidated financial statements, were due as follows (in thousands):

|                          |                |
|--------------------------|----------------|
| 2009                     | \$ 35,963      |
| 2010                     | 34,331         |
| 2011                     | 37,599         |
| 2012                     | 34,401         |
| 2013                     | 21,501         |
| Thereafter               | 38,359         |
| <br>Total long-term debt | <br>\$ 202,154 |

Our debt-financing agreements bear interest at the Euro Interbank Offered Rate (Euribor). Euribor is the primary interbank lending rate within the Euro zone, with maturities ranging from one week to one year. A disruption of the credit environment as currently experienced could negatively impact interbank lending and therefore negatively impact the Euribor rate. An increase in the Euribor rate would increase our cost of borrowing.

**Note 15. Commitments and Contingencies*****Financial guarantees***

In the normal course of business, we occasionally enter into agreements with third parties where we guarantee the performance of our subsidiaries related to certain service contracts, which may include services such as development, engineering, procurement of permits and equipment, construction management and monitoring and maintenance. These agreements meet the definition of a guarantee according to FASB Interpretation No. (FIN) 45, *Guarantors Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Other*. As of December 27, 2008, none of these guarantees were material to our financial position.

***Commercial commitments***

As of December 27, 2008, we had the following four outstanding commercial commitments in the form of letters of credit and bank guarantees: MYR 4.0 million dated June 2008 for an energy supply agreement (\$1.2 million at the balance sheet close rate on December 27, 2008 of \$0.29/MYR1.00); MYR 3.0 million dated September 2008 for Malaysian custom and excise tax (\$0.9 million at the balance sheet close rate on December 27, 2008 of \$0.29/MYR1.00); MYR 2.2 million dated December 2007 for an energy supply agreement (\$0.6 million at the balance sheet close rate on December 27, 2008 of \$0.29/MYR1.00); and \$1.3 million dated January 2008 for a sales and purchase agreement.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)*****Lease commitments***

We lease our corporate headquarters in Tempe, Arizona and administrative, business and marketing development, customer support and government affairs offices throughout the United States and Europe under non-cancelable operating leases. The leases require us to pay property taxes, common area maintenance and certain other costs in addition to base rent. We also lease certain machinery and equipment and office furniture and equipment under operating and capital leases. Future minimum payments under all of our non-cancelable leases are as follows as of December 27, 2008 (in thousands):

|  | <b>Capital<br/>Leases</b> | <b>Operating<br/>Leases</b> | <b>Total</b> |
|--|---------------------------|-----------------------------|--------------|
| 2009   | \$ 3                      | \$ 9,383                    | \$ 9,386     |
| 2010   | 2                         | 5,296                       | 5,298        |
| 2011   |                           | 4,850                       | 4,850        |
| 2012   |                           | 4,047                       | 4,047        |
| 2013   |                           | 3,916                       | 3,916        |
| Thereafter   |                           | 14,183                      | 14,183       |
| Total minimum lease payments                             | 5                         | \$ 41,675                   | \$ 41,680    |
| Less amounts representing interest                       |                           |                             |              |
| Present value of minimum lease payments                  | 5                         |                             |              |
| Less current portion of obligations under capital leases | (3)                       |                             |              |
| Non-current portion of obligations under capital leases  | \$ 2                      |                             |              |

Our rent expense was \$6.2 million, \$1.2 million and \$0.6 million in each of the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively.

***Purchase commitments***

We purchase raw materials for inventory, services and manufacturing equipment from a variety of vendors. During the normal course of business, in order to manage manufacturing lead times and help assure adequate supply, we enter into agreements with suppliers that either allow us to procure goods and services when we choose or that establish purchase requirements. In certain instances, these latter agreements allow us the option to cancel, reschedule, or adjust our requirements based on our business needs prior to firm orders being placed. Consequently, only a portion of our recorded purchase commitments are firm, non-cancelable and unconditional. At December 27, 2008, our obligations under firm, non-cancelable and unconditional agreements were \$1,072.4 million; of which, \$17.9 million was for commitments related to plant construction and maintenance. \$353.2 million of our purchase obligations are due in fiscal 2009.

***Product warranties***

We offer warranties on our products and record an estimate of the associated liability based on the number of solar modules under warranty at customer locations, our historical experience with warranty claims, our monitoring of field installation sites, our in-house testing of our solar modules and our estimated per-module replacement cost.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Product warranty activity during the years ended December 27, 2008 and December 29, 2007 was as follows (in thousands):

|   | <b>2008</b> | <b>2007</b> |
|---|-------------|-------------|
| Product warranty liability, beginning of period       | \$ 7,276    | \$ 2,764    |
| Accruals for new warranties issued (warranty expense) | 8,525       | 4,831       |
| Additional warranty from acquisition                  |             | 398         |
| Settlements   | (404)       | (258)       |
| Change in estimate of warranty liability              | (3,492)     | (459)       |
| Product warranty liability, end of period             | \$ 11,905   | \$ 7,276    |
| Current portion of warranty liability                 | \$ 4,040    | \$ 2,094    |
| Non-current portion of warranty liability             | \$ 7,865    | \$ 5,182    |

***Legal matters***

We are a party to legal matters and claims that are normal in the course of our operations. While we believe that the ultimate outcome of these matters will not have a material adverse effect on our financial position, results of operations or cash flows, the outcome of these matters is not determinable with certainty and negative outcomes may adversely affect us.

***Sales Agreements***

In 2006 and 2007, we entered into long-term contracts for the purchase and sale of our solar modules with twelve European solar power system project developers, system integrators and operators, and in 2008, we entered into four additional long-term contracts for the purchase and sale of our solar modules (collectively, the Long Term Supply Contracts). Under these contracts, we agree to provide each customer with solar modules totaling certain amounts of power generation capability during specified time periods. Our customers are entitled to certain remedies in the event of missed deliveries of the total kilowatt volume. These delivery commitments are established through a rolling four quarter forecast that defines the specific quantities to be purchased on a quarterly basis and schedules the individual shipments to be made to our customers. In the case of a late delivery, our customers are entitled to a maximum charge of up to 6% of the delinquent revenue. If we do not meet our annual minimum volume shipments or a stipulated minimum average watts per module, our customers also have the right to terminate these contracts on a prospective basis.

**Note 16. Stockholders Equity*****Preferred stock***

We have authorized 30,000,000 shares of undesignated preferred stock, \$0.001 par value, none of which was issued and outstanding at December 27, 2008. Our board of directors is authorized to determine the rights, preferences and

restrictions on any series of preferred stock that we may issue.

***Common stock***

We have authorized 500,000,000 shares of common stock, \$0.001 par value, of which 81,596,810 shares were issued and outstanding at December 27, 2008. Each share of common stock has the right to one vote. We have not declared or paid any dividends through December 27, 2008.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)*****Employee stock options on redeemable shares***

During the fiscal years ended December 27, 2003 and December 31, 2005, we issued to certain employees options to purchase a total of 1,872,100 shares of our common stock that had a provision allowing, upon the employees' deaths, their estates to sell any equity shares obtained as a result of exercising the options back to us at an amount equal to the then current fair value per share. As a result of this provision, we reported the vested portion of the intrinsic value of these stock options on our consolidated balance sheets as employee stock options on redeemable shares. These options also allowed the employees to sell back to us at fair value any equity shares obtained as a result of exercising the options if the employee became disabled or if his employment with us is terminated other than for cause or good reason or upon termination resulting from a change of control (as defined in the award agreement). We terminated these rights during the fiscal year ended December 29, 2007 by modifying the relevant option agreements and we reclassified the vested portion of the intrinsic value of these options to equity during that year.

***Equity transactions***

During the fiscal year ended December 30, 2006, we received \$302.7 million in net proceeds from the issuance of our common stock in an initial public offering, and during the fiscal year ended December 29, 2007, we received \$366.0 million in net proceeds from the issuance of our common stock in a follow-on offering. During the fiscal year ended December 30, 2006 we received cash equity contributions of \$30.0 million from our then sole owner.

During the year ended December 30, 2006, we received \$73.3 million from the issuance of \$74.0 million in convertible senior subordinated notes due in 2011, less \$0.7 million of issuance costs that we deferred. Later during the same year, we extinguished these notes by payment of 4,261,457 shares of our common stock to the note holder. This extinguishment took place under the terms of a negotiated extinguishment agreement and not under the conversion terms of the original note purchase agreement; however, the settlement terms of the negotiated extinguishment agreement were, in substance, similar to, but not identical to, the terms of the original note purchase agreement. As a result of the extinguishment, we recorded a \$74.0 million increase in our stockholders' equity and a loss of less than \$0.1 million on the extinguishment of the notes, which we recorded in other income (expense), net in our consolidated statements of operations.

**Note 17. Share-based Compensation**

We measure share-based compensation cost at the grant date based on the fair value of the award and recognize this cost as an expense over the grant recipients' requisite service periods, in accordance with SFAS 123(R). We adopted SFAS 123(R) during the first quarter of the year ended December 31, 2005 using the modified retrospective method, which involved adjusting our prior consolidated financial statements based on the amounts previously reported in our pro forma disclosures under SFAS 123. The share-based compensation expense that we recognized in our statements of operations for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 was as follows (in thousands):

|  | 2008 | 2007 | 2006 |
|--|------|------|------|
|--|------|------|------|

Share-based compensation expense included in:



Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|  |           |           |           |
|--|-----------|-----------|-----------|
| Cost of sales                          | \$ 12,216 | \$ 9,524  | \$ 4,160  |
| Research and development               | 5,967     | 4,719     | 2,348     |
| Selling, general and administrative    | 38,926    | 23,393    | 5,251     |
| Production start-up                    | 1,835     | 1,430     | 138       |
| Total share-based compensation expense | \$ 58,944 | \$ 39,066 | \$ 11,897 |

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

The following table presents our share-based compensation expense by type of award for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|   | <b>2008</b>      | <b>2007</b>      | <b>2006</b>      |
|---|------------------|------------------|------------------|
| Stock options                                 | \$ 15,983        | \$ 25,153        | \$ 11,622        |
| Restricted stock units                        | 42,418           | 13,977           |                  |
| Unrestricted stock                            | 325              | 297              | 115              |
| Net amount absorbed into inventory            | 218              | (361)            | 160              |
| <b>Total share-based compensation expense</b> | <b>\$ 58,944</b> | <b>\$ 39,066</b> | <b>\$ 11,897</b> |

The increase in our share-based compensation expense was primarily the result of the granting of new awards and an increase in the fair-values of our new awards compared with our older awards resulting from a general increase in our stock price.

Share-based compensation cost capitalized in our inventory was \$0.3 million, \$0.6 million, and \$0.2 million at December 27, 2008, December 29, 2007 and December 30, 2006, respectively.

The share-based compensation expense that we recognize in our results of operations is based on the number of awards expected to ultimately vest, so the actual award amounts have been reduced for estimated forfeitures. SFAS 123(R) requires us to estimate the number of awards that we expect to vest at the time the awards are granted and revise those estimates, if necessary, in subsequent periods. We estimate the number of awards that we expect to vest based on our historical experience with forfeitures of our awards, giving consideration to whether future forfeiture behavior might be expected to differ from past behavior. We recognize compensation cost for awards with graded vesting schedules on a straight-line basis over the requisite service periods for each separately vesting portion of the awards as if each award was in substance multiple awards.

At December 27, 2008, we had \$12.2 million of unrecognized share-based compensation cost related to unvested stock option awards, which we expect to recognize as an expense over a weighted-average period of two years, and \$87.8 million of unrecognized share-based compensation cost related to unvested restricted stock units, which we expect to recognize as an expense over a weighted-average period of two years. On April 30, 2007, we modified 474,374 of our share options to change their vesting dates from August 31, 2008 to August 31, 2007 and 1,171,060 of our share options to change their vesting dates from August 31, 2008 to January 15, 2008. These modifications did not affect the fair value of these share options that we used to calculate our share-based compensation expense, but the modifications did shorten the requisite service period over which we recognized that compensation expense and may also have increased the number of these share options that will ultimately vest.

During the year ended December 27, 2008, we recognized an income tax benefit in our statement of operations of \$17.1 million for share-based compensation costs incurred during that year. During the year ended December 29, 2007, we recognized an income tax benefit in our statement of operations of \$13.8 million for share-based compensation costs incurred during that year and an income tax benefit of \$6.7 million related to share-based

compensation costs incurred during prior years as a result of reversing the valuation allowance on our deferred tax assets. We did not recognize any income tax benefit for share-based compensation during the year ended December 30, 2006 due to the valuation allowance on our deferred tax assets.

***Share-based Compensation Plans***

During 2003, we adopted our 2003 Unit Option Plan (the 2003 Plan ). In connection with our February 2006 conversion from a limited liability company to a corporation, we converted each outstanding option to purchase one limited liability membership unit under the 2003 Plan into an option to purchase one share of our common stock, in each case at the same exercise price and subject to the other terms and conditions of the outstanding option. Under the 2003 Plan, we may grant non-qualified options to purchase common shares of First Solar, Inc. to associates of

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

First Solar, Inc. (including any of its subsidiaries) and non-employee individuals and entities that provide services to First Solar, Inc. or any of its subsidiaries. The 2003 Plan is administered by a committee appointed by our board of directors, which is authorized to, among other things, determine who will receive grants and determine the exercise price and vesting schedule of the options. The maximum number of new shares of our common stock that may be delivered by awards granted under the 2003 Plan is 6,847,060, and the shares underlying forfeited, expired, terminated, or cancelled awards become available for new award grants. Our board of directors may amend, modify, or terminate the 2003 Plan without the approval of our stockholders. We may not grant awards under the 2003 Plan after 2013, which is the tenth anniversary of the plan's approval by our stockholders. At December 27, 2008, 1,911,623 shares were available for grant under the 2003 Plan. All shares available for grant under the 2003 Plan, all options outstanding under the plan and all shares outstanding from the exercise of options under the plan have been adjusted to give effect to the 4.85 to 1 stock split of our common shares during 2006.

During 2006, we adopted our 2006 Omnibus Incentive Compensation Plan (the 2006 Plan). Under the 2006 Plan, directors, associates and consultants of First Solar, Inc. (including any of its subsidiaries) are eligible to participate. The 2006 Plan is administered by the compensation committee of our board of directors (or any other committee designated by our board of directors), which is authorized to, among other things, determine who will receive grants and determine the exercise price and vesting schedule of the awards made under the plan. The 2006 Plan provides for the grant of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock units, performance units, cash incentive awards and other equity-based and equity-related awards. The maximum number of new shares of our common stock that may be delivered by awards granted under the 2006 Plan is 5,820,000, of which the maximum number that may be delivered by incentive stock options is 5,820,000 and the maximum number that may be delivered as restricted stock awards is 2,910,000. Also, the shares underlying forfeited, expired, terminated, or cancelled awards become available for new award grants. Our board of directors may amend, modify, or terminate the 2006 Plan without the approval of our stockholders, except stockholder approval is required for amendments that would increase the maximum number of shares of our common stock available for awards under the plan, increase the maximum number of shares of our common stock that may be delivered by incentive stock options or modify the requirements for participation in the 2006 Plan. We may not grant awards under the 2006 Plan after 2016, which is the tenth anniversary of the plan's approval by our stockholders. At December 27, 2008, 3,380,102 shares were available for grant under the 2006 Plan.

**Stock Options**

Following is a summary of our stock options as of December 27, 2008 and changes during the year then ended:

|  | Number of<br>Shares<br>Under Option | Exercise<br>Price | Weighted Average<br>Remaining<br>Contractual<br>Term<br>(Years) | Aggregate<br>Intrinsic<br>Value |
|--|-------------------------------------|-------------------|---|---------------------------------|
| Options outstanding at December 29, 2007 | 4,424,438                           | \$ 9.92           |   |                                 |
| Options granted                          | 135,000                             | \$ 251.31         |   |                                 |
| Options exercised                        | (2,979,990)                         | \$ 5.38           |   |                                 |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|  |           |    |       |     |                |
|--|-----------|----|-------|-----|----------------|
| Options forfeited or expired                           | (43,138)  | \$ | 20.85 |     |                |
| Options outstanding at December 27, 2008               | 1,536,310 | \$ | 39.63 | 5.6 | \$ 146,534,000 |
| Options vested and exercisable at<br>December 27, 2008 | 510,204   | \$ | 11.50 | 4.5 | \$ 63,017,000  |

Stock options granted under the 2003 Plan and 2006 Plan have various vesting provisions. Some cliff-vest, some vest ratably following the grant date, some vest at different rates during different portions of their vesting

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

periods and some vested on the date of grant. The total fair value of stock options vesting during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 were \$33.9 million, \$5.4 million and \$1.4 million, respectively. During the years ended December 27, 2008, December 29, 2007 and December 30, 2006, we received net cash proceeds of \$16.0 million, \$10.2 million and \$0.1 million, respectively, from the exercise of employee options on our stock. The total intrinsic value of employee stock options exercised was \$675.5 million, \$230.2 million and \$0.7 million during the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively.

The following table presents exercise price and remaining life information about options outstanding at December 27, 2008:

| <b>Options Outstanding</b>  |                         |  |  |                            |  |
|-----------------------------|-------------------------|--|--|----------------------------|--|
| <b>Exercise Price Range</b> | <b>Number of Shares</b> | <b>Weighted Average Exercise Price</b> | <b>Weighted Remaining Contractual Term (Years)</b> | <b>Options Exercisable</b> |  |
|                             |                         |  |  | <b>Number of Shares</b>    | <b>Weighted Average Exercise Price</b> |
| \$2.06 - \$4.54             | 468,307                 | \$ 3.85                                | 3.7  | 371,308                    | \$ 3.70                                |
| \$20.00 - \$32.81           | 775,614                 | \$ 20.53                               | 4.9  | 92,727                     | \$ 20.70                               |
| \$54.50 - \$55.56           | 147,600                 | \$ 54.55                               | 5.2  | 45,338                     | \$ 54.57                               |
| \$120.28                    | 9,789                   | \$ 120.28                              | 5.6  | 831                        | \$ 120.28                              |
| \$181.77                    | 25,000                  | \$ 181.77                              | 6.1  |                            |  |
| \$266.90 - \$267.14         | 110,000                 | \$ 267.12                              | 6.1  |                            |  |
|                             | 1,536,310               | \$ 39.63                               | 5.6  | 510,204                    | \$ 11.50                               |

We estimated the fair value of each stock option awarded on its grant date using the Black-Scholes-Merton closed-form option valuation formula, using the assumptions documented in the following table for the years ended December 27, 2008, December 29, 2007 and December 30, 2006:

|                                      | <b>2008</b>         | <b>2007</b>        | <b>2006</b>       |
|--------------------------------------|---------------------|--------------------|-------------------|
| Price of our stock on grant date     | \$181.77 - \$266.90 | \$32.81 - \$120.28 | \$20.00 - \$28.59 |
| Stock option exercise price          | \$181.77 - \$267.14 | \$32.81 - \$120.28 | \$20.00 - \$28.59 |
| Expected life of option              | 4.0 - 6.0 years     | 3.9 - 6.0 years    | 3.5 - 6.0 years   |
| Expected volatility of our stock     | 70%                 | 70% - 75%          | 75%               |
| Risk-free interest rate              | 2.6% - 3.4%         | 4.4% - 4.8%        | 4.6% - 4.7%       |
| Expected dividend yield of our stock | 0.0%                | 0.0%               | 0.0%              |

The weighted-average estimated grant-date fair value of the stock options that we granted during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 were \$113.01, \$34.93 and \$12.66, respectively.

Our stock options expire seven to ten years from their grant date. We estimated the expected life, which represents our best estimate of the period of time from the grant date that we expect the stock options to remain outstanding, of all of our stock options for all periods presented using the simplified method specified in SAB 107, as amended by SAB 110. Under this method, we estimate the expected life of our stock options as the mid-point between their time to vest and their contractual terms. We applied the simplified method because we do not have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected life due to the limited period of time our equity shares have been publicly traded and the significant differences in vesting and contractual terms between the majority of our options that have been exercised through December 27, 2008 and the options that we granted during the year ended on that date.

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Because our stock is newly publicly traded, we do not have a meaningful observable share-price volatility; therefore, we based our estimate of the expected volatility of our future stock price on that of similar publicly-traded companies, and we expect to continue to estimate our expected stock price volatility in this manner until such time as we might have adequate historical data to refer to from our own traded share prices. We used U.S. Treasury rates in effect at the time of the grants for the risk-free rates.

None of our stock options were granted outside of either the 2003 Plan or the 2006 Plan.

***Restricted Stock Units***

We began issuing restricted stock units in the second quarter of 2007, all of which have been granted under the 2006 Plan. We issue shares to the holders of restricted units on the date the restricted stock units vest. The majority of shares issued are net of the statutory withholding requirements, which we will pay on behalf of our associates. As a result, the actual number of shares issued will be less than the number of restricted stock units granted. Prior to vesting, restricted stock units do not have dividend equivalent rights and do not have voting rights, and the shares underlying the restricted stock units are not considered issued and outstanding.

Following is a summary of our restricted stock units as of December 27, 2008 and changes during the year then ended:

|   | <b>Number of Shares</b> |    | <b>Weighted<br/>Average<br/>Grant-Date<br/>Fair Value</b> |
|---|-------------------------|----|---|
| Restricted stock units outstanding at December 29, 2007 | 301,628                 | \$ | 109.79  |
| Restricted stock units granted                          | 472,550                 | \$ | 242.36  |
| Restricted stock units vesting                          | (66,071)                | \$ | 123.52  |
| Restricted stock units forfeited or expired             | (57,853)                | \$ | 167.81  |
| Restricted stock units outstanding at December 27, 2008 | 650,254                 | \$ | 201.32  |

We estimate the fair value of our restricted stock unit awards as our stock price on the grant date.

***Stock Awards***

During the years ended December 27, 2008, December 29, 2007 and December 30, 2006, we awarded 1,384, 4,845 and 2,188, respectively, fully vested, unrestricted shares of our common to the independent members of our board of directors. We recognized \$0.3 million of share-based compensation expense for these awards during the years ended December 27, 2008 and December 29, 2007 and \$0.1 million during December 30, 2006.

**Note 18. Benefit Plans**



We offer a 401(k) retirement savings plan into which all of our U.S. associates (our term for employees) can voluntarily contribute a portion of their annual salaries and wages, subject to legally prescribed dollar limits. Our contributions to our associates' plan accounts are made at the discretion of our board of directors and are based on a percentage of the participating associates' contributions. In addition, our 401(k) plan had required a four year vesting period on employer contributions, but we changed the vesting period in 2008 to one year. During 2008, we matched half of the first 8% of the compensation that our associates contributed to the 401(k) Plan. Effective January 1, 2009, associate contributions will be matched dollar-for-dollar up to the first 4%. Our contributions to the plans were \$2.0 million, \$0.6 million and \$0.3 million for the years ended December 27, 2008, December 29, 2007 and December 30, 2006, respectively. None of these benefit plans offered participants an option to invest in our common stock.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

In addition, effective fiscal 2008, we offer certain retirement savings plans to employees at our foreign subsidiaries in Europe. These plans are managed in accordance with applicable local statutes and practices and are defined contribution plans. Our contributions to these plans were \$0.4 million during 2008.

**Note 19. Income Taxes**

The components of our income tax expense (benefit) were as follows during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|                                    | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|------------------------------------|-------------|-------------|-------------|
| Current expense (benefit):         |             |             |             |
| Federal                            | \$ 27,328   | \$ 25,163   | \$ 4,401    |
| State                              | 1,312       | 828         | 453         |
| Foreign                            | 99,780      | 27,498      | 352         |
| Total current expense (benefit)    | 128,420     | 53,489      | 5,206       |
| Deferred expense (benefit):        |             |             |             |
| Federal                            | (14,388)    | (49,888)    |             |
| State                              | (163)       | (148)       |             |
| Foreign                            | 1,577       | (5,845)     |             |
| Total deferred expense (benefit)   | (12,974)    | (55,881)    |             |
| Total income tax expense (benefit) | \$ 115,446  | \$ (2,392)  | \$ 5,206    |

The current tax expense listed above does not reflect income tax benefits of \$28.7 million and \$26.6 million for the years ended December 27, 2008 and December 29, 2007, respectively, related to tax deductions on share-based compensation because we recorded these benefits directly to additional paid-in capital, pursuant to SFAS 109 and SFAS 123(R).

The U.S. and non-U.S. components of our income before income taxes were as follows during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|                            | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|----------------------------|-------------|-------------|-------------|
| U.S. income                | \$ 42,917   | \$ 72,976   | \$ 10,314   |
| Non-U.S. income (loss)     | 420,859     | 82,986      | (1,134)     |
| Income before income taxes | \$ 463,776  | \$ 155,962  | \$ 9,180    |

Our Malaysian subsidiary was granted a tax holiday for a period of 16.5 years, beginning on January 1, 2009. The tax holiday provides for an income tax exemption of 100% on statutory income provided that certain criteria are met. During the fourth quarter of fiscal 2008, we formally requested a one-year acceleration of the tax holiday to be effective January 1, 2008. On January 9, 2009 we received formal approval from the Malaysian government granting our request to pull forward the previously approved tax holiday by one year. Due to the fact that this approval was granted subsequent to the end of 2008, we concluded that the tax benefit from the one-year pull-forward of the tax holiday will be reflected in our first quarter of 2009 financial results, the period in which our request was formally granted. As a result we will recognize an income tax benefit of \$11.6 million in the first quarter of 2009. See also Note 25 to our consolidated financial statements.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Our income tax results differed from the amount computed by applying the U.S. statutory federal income tax rate of 35% to our income before income taxes for the following reasons during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|  | <b>2008</b> |                | <b>2007</b> |                | <b>2006</b> |                |
|--|-------------|----------------|-------------|----------------|-------------|----------------|
|  | <b>Tax</b>  | <b>Percent</b> | <b>Tax</b>  | <b>Percent</b> | <b>Tax</b>  | <b>Percent</b> |
| Statutory income tax expense             | \$ 162,322  | 35.0%          | \$ 54,587   | 35.0%          | \$ 3,213    | 35.0%          |
| Economic development funding benefit     |             | 0.0            | (3,122)     | (2.0)          | (8,873)     | (96.7)         |
| Non-deductible expenses                  | 4,590       | 1.0            | 1,398       | 0.9            | 733         | 8.0            |
| State tax, net of federal benefit        | (500)       | (0.1)          | 778         | 0.5            | 244         | 2.7            |
| Effect of tax holiday on deferred taxes  | (20,464)    | (4.4)          |             | 0.0            |             | 0.0            |
| Foreign tax rate differential            | (31,347)    | (6.8)          | 4,216       | 2.7            | (53)        | (0.6)          |
| Tax credits                              | (4,736)     | (1.0)          | (1,503)     | (1.0)          |             | 0.0            |
| Non-taxable income                       | (205)       | 0.0            | (3,373)     | (2.1)          |             | 0.0            |
| Other                                    | 5,285       | 1.1            | (1,079)     | (0.7)          | (235)       | (2.6)          |
| Impact of changes in valuation allowance | 501         | 0.1            | (54,294)    | (34.8)         | 10,177      | 110.9          |
| Reported income tax expense (benefit)    | \$ 115,446  | 24.9%          | \$ (2,392)  | (1.5)%         | \$ 5,206    | 56.7%          |

The tax benefit from the foreign tax rate differential primarily relates to our income generated in Germany and Malaysia which is subject to tax rates of 28.4% and 26.0% for the year ended December 27, 2008, respectively, compared to the US statutory tax rate of 35%. The tax benefit from the effect of the Malaysian tax holiday on deferred taxes relates to the deferred tax impact of taxable temporary differences, primarily attributable to accelerated tax depreciation, which we anticipate will reverse in a tax-free manner during the tax holiday.

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities calculated for financial reporting purposes and the amounts calculated for preparing our income tax returns in accordance with tax regulations and of the net tax effects of operating loss and tax credit carryforwards. The items that gave rise to our deferred taxes at December 27, 2008 and December 29, 2007 were as follows (in thousands):

|   | <b>2008</b> | <b>2007</b> |
|---|-------------|-------------|
| Deferred tax assets:                            |             |             |
| Goodwill  | \$ 32,736   | \$ 35,605   |
| Economic development funding                    | 6,550       | 8,143       |
| Share-based compensation                        | 18,937      | 13,972      |
| Accrued expenses                                | 10,104      | 5,148       |
| Tax credits                                     | 13,200      | 933         |
| Net operating losses                            | 1,097       | 1,371       |
| Inventory                                       | 1,744       | 822         |
| Other   | 725         |             |
| Deferred tax assets, gross                      | 85,093      | 65,994      |
| Valuation allowance                             | (1,097)     | (596)       |
| Deferred tax assets, net of valuation allowance | 83,996      | 65,398      |
| Deferred tax liabilities:                       |             |             |
| Capitalized interest                            | (1,400)     | (1,993)     |
| Property, plant and equipment                   | (13,566)    | (7,616)     |
| Other   |             | (88)        |
| Deferred tax liabilities                        | (14,966)    | (9,697)     |
| Net deferred tax assets and liabilities         | \$ 69,030   | \$ 55,701   |

Changes in our valuation allowance against our deferred tax assets were as follows during the years ended December 27, 2008 and December 29, 2007 (in thousands):

|  | <b>2008</b> | <b>2007</b> |
|--|-------------|-------------|
| Valuation allowance, beginning of year | \$ 596      | \$ 54,890   |
| Additions                              | 1,097       | 596         |
| Reversals                              | (596)       | (54,890)    |
| Valuation allowance, end of year       | \$ 1,097    | \$ 596      |

We maintained a valuation allowance of \$1.1 million and \$0.6 million as of December 27, 2008 and December 29, 2007, respectively, against certain of our deferred tax assets, as it is more likely than not that such amounts will not be fully realized. During the year ended December 27, 2008, we reversed our valuation allowance in the amount of \$0.6 million related to Malaysian net deferred tax assets and increased our valuation allowance related to state net operating loss carryforwards. During the year ended December 29, 2007, we reversed our valuation allowance in the amount \$54.9 million related to U.S. and German net deferred tax assets and we increased our valuation allowance \$0.6 million for Malaysian net deferred tax assets.

We have not provided for \$50.0 million of deferred income taxes on \$344.7 million of undistributed earnings from non-U.S. subsidiaries because such amounts are indefinitely invested outside the United States as of

Table of Contents**FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

December 27, 2008. These taxes would be required to be recognized when and if we determine that these amounts are not indefinitely reinvested outside the U.S.

At December 27, 2008, we had U.S. federal and aggregate state net operating loss carryforwards of \$683.7 million and \$97.2 million, respectively. At December 29, 2007 we had U.S. federal and aggregate state net operating loss carryforwards of \$131.3 million and \$55.3 million, respectively. If not used, the U.S. federal net operating loss will expire in 2027 and 2028 and the state net operating loss will begin to expire in 2012. The utilization of a portion of our net operating loss carryforwards is subject to an annual limitation under Section 382 of the Internal Revenue Code due to a change of ownership. However, we do not believe such annual limitation will impact our realization of the net operating loss carryforwards. Our deferred tax assets at December 27, 2008 do not include \$244.8 million related to \$683.7 million of excess tax deductions from employee stock option exercises and vested restricted stock units that comprise our net operating loss carryovers. Our equity will be increased by up to \$244.8 million if and when we ultimately realize these excess tax benefits.

At December 27, 2008 we had U.S. federal research and developmental credit carryovers of \$5.7 million and foreign tax credit carryovers of \$7.1 million available to reduce future income tax liabilities. If not used, the research and development credits and foreign tax credits will begin to expire in 2027 through 2028 and 2017 through 2018, respectively.

We adopted the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* an *Interpretation of FASB Statement No. 109* ( FIN 48 ) on December 31, 2006. This interpretation clarified the accounting for uncertain tax positions and requires companies to recognize the impact of a tax position in their financial statements, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The adoption of FIN 48 resulted in the establishment of \$56,000 of liabilities and a reduction in our stockholders' equity in the same amount.

A reconciliation of the beginning and ending amount of liabilities associated with uncertain tax positions for the years ended December 27, 2008, and December 29, 2007 is as follows (in thousands):

|   | <b>2008</b> | <b>2007</b> |
|---|-------------|-------------|
| Unrecognized tax benefits, beginning of year  | \$ 2,465    | \$ 56       |
| Increases related to prior year tax positions | 777         | 413         |
| Decreases related to prior year tax positions | (1,677)     |             |
| Decreases related to settlements              | (469)       |             |
| Increases related to current tax positions    | 6,438       | 1,996       |
| Unrecognized tax benefits, end of year        | \$ 7,534    | \$ 2,465    |

The entire amount of unrecognized tax benefits, if recognized, would reduce our annual effective tax rate. The amounts of unrecognized tax benefits listed above is based on the recognition and measurement criteria of FIN 48. However, due to the uncertain and complex application of tax regulations, it is possible that the ultimate resolution of

uncertain tax positions may result in liabilities which could be materially different from these estimates. In such an event, we will record additional tax expense or tax benefit in the period in which such resolution occurs. Our policy is to recognize any interest and penalties that we might incur related to our tax positions as of component of income tax expense. We did not accrue any potential penalties and interest related to these unrecognized tax benefits during 2008. We do not believe it is reasonably possible our unrecognized tax benefits will significantly change within the next twelve months for tax positions taken or to be taken for periods through December 27, 2008.



**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

The following table summarizes the tax years that are either currently under audit or remain open and subject to examination by the tax authorities in the most significant jurisdictions in which we operate:

|               | <b>Tax Years</b> |
|---------------|------------------|
| Germany       | 2007 - 2008      |
| Malaysia      | 2007 - 2008      |
| United States | 2006 - 2008      |

In certain of the jurisdictions noted above, we operate through more than one legal entity, each of which has different open years subject to examination. The table above presents the open years subject to examination for the most material of the legal entities in each jurisdiction. Additionally, it is important to note that tax years are technically not closed until the statute of limitations in each jurisdiction expires. In the jurisdictions noted above, the statute of limitations can extend beyond the open years subject to examination.

**Note 20. Net Income per Share**

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed giving effect to all potential dilutive common stock, including employee stock options and restricted stock units.

The calculation of basic and diluted net income per share for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 is as follows (in thousands, except per share amounts):

|  | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|--|-------------|-------------|-------------|
| <b>Basic net income per share</b>                                      |             |             |             |
| Numerator:   |             |             |             |
| Net income   | \$ 348,330  | \$ 158,354  | \$ 3,974    |
| Denominator:   |             |             |             |
| Weighted-average common stock outstanding                              | 80,178      | 74,701      | 55,651      |
| Effect of rights issue   |             |             | 659         |
| Weighted-average shares used in computing basic net income per share   | 80,178      | 74,701      | 56,310      |
| <b>Diluted net income per share</b>                                    |             |             |             |
| Denominator:   |             |             |             |
| Weighted-average shares used in computing basic net income per share   | 80,178      | 74,701      | 56,310      |
| Effect of stock options and restricted stock units outstanding         | 1,946       | 3,270       | 1,945       |
| Weighted-average shares used in computing diluted net income per share | 82,124      | 77,971      | 58,255      |

|                       |          | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|-----------------------|----------|-------------|-------------|-------------|
| Per share information | basic:   |             |             |             |
| Net income per share  |          | \$ 4.34     | \$ 2.12     | \$ 0.07     |
| Per share information | diluted: |             |             |             |
| Net income per share  |          | \$ 4.24     | \$ 2.03     | \$ 0.07     |

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

The following number of outstanding employee stock options and restricted stock units were excluded from the computation of diluted net income per share for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 as it would have had an antidilutive effect (in thousands):

|   | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|---|-------------|-------------|-------------|
| Options to purchase common stock and restricted stock units | 192         | 2,632       | 3,363       |

**Note 21. Accumulated Other Comprehensive Income (Loss)**

Comprehensive income (loss), which includes foreign currency translation adjustments, unrealized gains (losses) on derivative instruments designated and qualifying as cash flow hedges and unrealized gains (losses) on available-for-sale securities, the impact of which has been excluded from net income and reflected as components of stockholders equity, is as follows (in thousands):

|  | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|--|-------------|-------------|-------------|
| Net income   | \$ 348,330  | \$ 158,354  | \$ 3,974    |
| Foreign currency translation adjustments   | (13,943)    | 5,116       | 803         |
| Change in unrealized gain on marketable securities, net of tax of \$(129) for 2008         | 234         | 28          |             |
| Change in unrealized (loss) gain on derivative instruments, net of tax of \$(887) for 2008 | (15,230)    | (1,648)     | 20          |
| Comprehensive income   | \$ 319,391  | \$ 161,850  | \$ 4,797    |

Components of accumulated other comprehensive income (loss) were as follows (in thousands):

|   | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|---|-------------|-------------|-------------|
| Foreign currency translation adjustments                                      | \$ (7,825)  | \$ 6,118    | \$ 1,002    |
| Unrealized gain on marketable securities, net of tax of \$(144) for 2008      | 262         | 28          |             |
| Unrealized (loss) gain on derivative instruments, net of tax of \$65 for 2008 | (16,858)    | (1,628)     | 20          |
| Accumulated other comprehensive income (loss)                                 | \$ (24,421) | \$ 4,518    | \$ 1,022    |

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)****Note 22. Statement of Cash Flows**

Following is a reconciliation of net income to net cash provided by (used) in operating activities for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (in thousands):

|   | <b>2008</b> | <b>2007</b> | <b>2006</b> |
|---|-------------|-------------|-------------|
| Net income  | \$ 348,330  | \$ 158,354  | \$ 3,974    |
| Adjustment to reconcile net income, to cash provided by (used in) operating activities: |             |             |             |
| Depreciation and amortization   | 59,518      | 24,481      | 10,210      |
| Intangible impairment   | 1,335       |             |             |
| Share-based compensation  | 58,944      | 38,965      | 11,897      |
| Remeasurement of debt   | 32          |             |             |
| Deferred income taxes   | (12,974)    | (55,881)    |             |
| Excess tax benefits from share-based compensation arrangements                          | (28,661)    | (30,196)    | (45)        |
| Loss on disposal of property and equipment  | 993         | 321         | 314         |
| Non-cash interest   |             |             | 394         |
| Non-cash loss   |             |             | 45          |
| Provision for doubtful accounts receivable  | (5)         |             |             |
| Provision for excess and obsolete inventories   | 2,548       | 34          | 11          |
| Gain on sales of investments, net   | (189)       |             |             |
| Changes in operating assets and liabilities, net of effects of acquisition:             |             |             |             |
| Accounts receivable   | (40,852)    | 10,975      | (28,149)    |
| Inventories   | (84,762)    | (19,832)    | (9,753)     |
| Deferred project costs  | 1,933       | 2,333       |             |
| Prepaid expenses and other current assets   | (47,988)    | (7,359)     | (6,689)     |
| Costs and estimated earnings in excess of billings                                      | (108)       | 28          |             |
| Other noncurrent assets   | (4,935)     | (4,179)     | 142         |
| Billings in excess of costs and estimated earnings                                      | 10          | (1,992)     |             |
| Accounts payable and accrued expenses   | 209,898     | 89,899      | 17,073      |
| Total adjustments   | 114,737     | 47,597      | (4,550)     |
| Net cash provided by (used in) operating activities                                     | \$ 463,067  | \$ 205,951  | \$ (576)    |

**Note 23. Segment and Geographical Information**

SFAS 131, *Disclosure about Segments of an Enterprise and Related Information*, establishes standards for companies to report in their financial statements information about operating segments, products, services, geographic areas and major customers. The method of determining what information to report is based on the way that management organizes the operating segments within the company for making operating decisions and assessing financial

performance. The components segment, which is our principal business, involves the design, manufacture and sale of solar modules, which convert sunlight to electricity. We sell our solar modules to thirteen principal customers, with which we have long term supply contracts. These customers include project developers, system integrators and operators of renewable energy projects.

We also sell solar power systems directly to system owners. These systems include both our solar modules and balance of system components that we procure from third parties. These sales may also include services such as

**Table of Contents****FIRST SOLAR, INC. AND SUBSIDIARIES****Notes to Consolidated Financial Statements (Continued)**

development, engineering, procurement of permits and equipment, construction management, monitoring and maintenance. We do not recognize revenue from intercompany sales by our components segments to our solar power systems and project development business. Instead, the sale of our solar panels manufactured by the components segment and used for construction projects are included in net sales of our solar power system and project development business. Our solar power systems and project development business does not currently meet the quantitative criteria for disclosure as a separate reporting segment and therefore we classify it in the Other category in the following tables (in thousands):

|                                      | Fiscal Year Ended<br>December 27, 2008 |             |              | Fiscal Year Ended<br>December 29, 2007 |           |              |
|--------------------------------------|--|-------------|--------------|--|-----------|--------------|
|                                      | Components                             | Other       | Consolidated | Components                             | Other     | Consolidated |
| Net sales                            | \$ 1,192,611                           | \$ 53,690   | \$ 1,246,301 | \$ 500,293                             | \$ 3,683  | \$ 503,976   |
| Income (loss) before<br>income taxes | \$ 482,560                             | \$ (18,784) | \$ 463,776   | \$ 156,119                             | \$ (157)  | \$ 155,962   |
| Goodwill                             | \$                                     | \$ 33,829   | \$ 33,829    | \$                                     | \$ 33,449 | \$ 33,449    |
| Total Assets                         | \$ 2,028,638                           | \$ 85,864   | \$ 2,114,502 | \$ 1,317,949                           | \$ 53,363 | \$ 1,371,312 |

The following table presents net sales for the years ended December 27, 2008, December 29, 2007 and December 30, 2006 by geographic region, which is based on the customer country of invoicing (in thousands):

|                             | 2008         | 2007       | 2006       |
|-----------------------------|--------------|------------|------------|
| United States               | \$ 63,117    | \$ 5,837   | \$ 6,735   |
| Germany                     | 919,335      | 457,332    | 128,239    |
| All other foreign countries | 263,849      | 40,807     |            |
| Net sales                   | \$ 1,246,301 | \$ 503,976 | \$ 134,974 |

The following table presents long-lived assets, excluding financial instruments, deferred tax assets, goodwill and intangible assets, at December 27, 2008, December 29, 2007 and December 30, 2006 by geographic region, based on the physical location of the assets (in thousands):

|                   | 2008       | 2007       | 2006       |
|-------------------|------------|------------|------------|
| United States     | \$ 162,651 | \$ 101,335 | \$ 98,559  |
| Germany           | 87,709     | 96,470     | 80,309     |
| Malaysia          | 592,262    | 232,299    |            |
| Long-lived assets | \$ 842,622 | \$ 430,104 | \$ 178,868 |

**Note 24. Concentrations of Credit and Other Risks**

*Customer concentration.* The following customers each comprised 10% or more of our total net sales during the years ended December 27, 2008, December 29, 2007 and December 30, 2006 (dollars in thousands):

|             | <b>2008</b>      |                   | <b>2007</b>      |                   | <b>2006</b>      |                   |
|-------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
|             | <b>Net Sales</b> | <b>% of Total</b> | <b>Net Sales</b> | <b>% of Total</b> | <b>Net Sales</b> | <b>% of Total</b> |
| Customer #1 | \$ 138,822       | 11.1%             | \$ 74,465        | 14.8%             | \$ 23,023        | 17.1%             |
| Customer #2 | \$ 135,232       | 10.9%             | \$ 51,989        | 10.3%             | \$ 21,568        | 16.0%             |
| Customer #3 | \$ 143,857       | 11.5%             | \$ 76,669        | 15.2%             | \$ 25,882        | 19.2%             |
| Customer #4 | \$ 231,557       | 18.6%             | \$ 113,664       | 22.6%             | \$ 25,054        | 18.6%             |
| Customer #5 | \$ 149,946       | 12.0%             | \$ 68,492        | 13.6%             | \$ 22,353        | 16.6%             |
| Customer #6 | \$ *             | *%                | \$ 65,352        | 13.0%             | \$ *             | *%                |

\* Net sales to this customer were less than 10% of our total net sales during this period.

**Table of Contents**

**FIRST SOLAR, INC. AND SUBSIDIARIES**

**Notes to Consolidated Financial Statements (Continued)**

During 2006, we entered into five-year supply agreements, with an option for a sixth year, with six customers that develop solar energy investment projects in Germany, and during 2007, we entered into additional long-term contracts for the purchase and sale of our solar modules with six other European project developers that also own and operate renewable energy projects. During 2008, we entered into four additional long-term contracts. Under all of these agreements, we agreed to supply the customers with modules with specified total power ratings at specified prices throughout the term of the contract, along with other terms and conditions.

*Credit risk.* Financial instruments that potentially subject us to concentrations of credit risk are primarily cash, cash equivalents, investments, trade accounts receivable, interest rate swap agreements and derivative instruments. We place cash, cash equivalents and investments with high-credit quality institutions and limit the amount of credit risk from any one counterparty. As previously noted, our sales are primarily concentrated among five customers. We monitor the financial condition of our customers and perform credit evaluations whenever deemed necessary. As of December 27, 2008, we had received letters of credit from nine of our customers securing accounts receivable as required by our long-term customer contracts. Further, effective 2007 our customer payment terms have been reduced to 10 days. We have generally not required collateral for our sales on account.

*Geographic risk.* Our solar modules are presently primarily sold to our customers for use in solar power systems concentrated in a single geographic region, Germany. This concentration of our sales in one geographic region exposes us to local economic risks and local risks from natural or man-made disasters.

*Production.* Our products include components that are available from a limited number of suppliers or sources. Shortages of essential components could occur due to interruptions of supply or increases in demand and could impair our ability to meet demand for our products. Our modules are presently produced in facilities in Perrysburg, Ohio, Frankfurt/Oder, Germany and Kulim, Malaysia. Damage to or disruption of facilities could interrupt our business and impair our ability to generate sales.

*International operations.* We derive substantially all of our revenue from sales outside our country of domicile, the United States. Therefore, our financial performance could be affected by events such as changes in foreign currency exchange rates, trade protection measures, long accounts receivable collection patterns and changes in regional or worldwide economic or political conditions.

**Note 25. Subsequent Events**

As previously disclosed, our Malaysian subsidiary was granted an exemption from Malaysian taxes for 16.5 years, beginning January 1, 2009. During the fourth quarter of fiscal 2008, we formally requested a one-year acceleration of the tax holiday to be effective January 1, 2008. On January 9, 2009 we received formal approval from the Malaysian Industrial Development Authority (MIDA) granting our request to pull forward the previously approved tax holiday by one year. Due to the fact that this approval was granted subsequent to the end of fiscal year 2008, we concluded that the financial impact will be reflected in our first quarter of 2009 financial results. As a result we will recognize an income tax benefit of \$11.6 million in the first quarter of 2009. Please refer also to Note 19 to our consolidated financial statements (Income Taxes).



On January 22, 2009 we entered into a loan agreement for an amount of 21.0 million (\$29.4 million at the balance sheet close rate on December 27, 2008 of \$1.40/ 1.00) with a customer to partially finance a photovoltaic project. The loan bears interest at 8% p.a. and is due on March 31, 2009. The loan is collateralized by the shares of the photovoltaic project. Under the loan we have the option to partially or all outright own the project. Under this arrangement we may not be able to recognize revenue for our solar module sales to this customer related to this project.

**Table of Contents****INDEX TO EXHIBITS**

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Annual Report on Form 10-K:

| <b>Exhibit Number</b> | <b>Exhibit Description</b>  | <b>Incorporated by Reference</b> |                 |                             | <b>Exhibit Number</b> | <b>Filed Herewith</b> |
|-----------------------|---|----------------------------------|-----------------|-----------------------------|-----------------------|-----------------------|
|                       |   | <b>Form</b>                      | <b>File No.</b> | <b>Date of First Filing</b> |                       |                       |
| 3.1                   | Amended and Restated Certificate of Incorporation of First Solar Inc.   | S-1/A                            | 333-135574      | 9/18/06                     | 3.1                   |                       |
| 3.2                   | By-Laws of First Solar Inc.   | S-1/A                            | 333-135574      | 11/16/06                    | 3.1                   |                       |
| 4.1                   | Loan Agreement dated December 1, 2003, among First Solar US Manufacturing, LLC, First Solar Property, LLC and the Director of Development of the State of Ohio.   | S-1/A                            | 333-135574      | 9/18/06                     | 4.2                   |                       |
| 4.2                   | Loan Agreement dated July 1, 2005, among First Solar US Manufacturing, LLC, First Solar Property, LLC and Director of Development of the State of Ohio.   | S-1/A                            | 333-135574      | 9/18/06                     | 4.3                   |                       |
| 4.3                   | Facility Agreement dated July 27, 2006, between First Solar Manufacturing GmbH, subject to the joint and several liability of First Solar Holdings GmbH and First Solar GmbH and IKB Deutsche Industriebank AG.                   | S-1/A                            | 333-135574      | 9/18/06                     | 4.11                  |                       |
| 4.4                   | Addendum No. 1 to Facility Agreement dated July 27, 2006, between First Solar Manufacturing GmbH, subject to the joint and several liability of First Solar Holdings GmbH and First Solar GmbH and IKB Deutsche Industriebank AG. | S-1/A                            | 333-135574      | 9/18/06                     | 4.12                  |                       |
| 4.5                   | Waiver Letter dated June 5, 2006, from the Director of Development of the State of Ohio.  | S-1/A                            | 333-135574      | 10/10/06                    | 4.16                  |                       |
| 4.6                   | Amendment No. 3 to the Facility Agreement dated July 27, 2006 between First Solar Manufacturing GmbH and IKB Deutsche Industriebank AG dated March 31, 2008   | 10-Q                             | 001-33156       | 05/02/08                    | 4.1                   |                       |
| 4.7                   | Facility Agreement dated May 6, 2008 between First Solar Malaysia Sdn. Bhd., as borrower, and IKB Deutsche Industriebank AG, as arranger, NATIXIS   | 8-K                              | 001-33156       | 05/12/08                    | 10.1                  |                       |

|      |   |       |            |          |      |
|------|---|-------|------------|----------|------|
|      | Zweigniederlassung Deutschland, as facility agent and original lender, AKA Ausfuhrkredit-Gesellschaft mbH, as original lender, and NATIXIS Labuan Branch as security agent  |       |            |          |      |
| 4.8  | First Demand Guaranty dated May 6, 2008 by First Solar Inc, as guarantor, in favor of IKB Deutsche Industriebank AG, NATIXIS Zweigniederlassung Deutschland, AKA Ausfuhrkredit-Gesellschaft mbH and NATIXIS Labuan Branch | 8-K   | 001-33156  | 05/12/08 | 10.2 |
| 10.1 | Framework Agreement on the Sale and Purchase of Solar Modules dated April 10, 2006, between First Solar GmbH and Blitzstrom GmbH.   | S-1/A | 333-135574 | 11/8/06  | 10.1 |

**Table of Contents**

| Exhibit Number | Exhibit Description   | Incorporated by Reference |            |                      | Exhibit Number | Filed Herewith |
|----------------|---|---------------------------|------------|----------------------|----------------|----------------|
|                |   | Form                      | File No.   | Date of First Filing |                |                |
| 10.2           | Amendment to the Framework Agreement dated April 10, 2006 on the Sale and Purchase of Solar Modules between First Solar GmbH and Blitzstrom GmbH.   | 10-K                      | 001-33156  | 3/16/07              | 10.02          |                |
| 10.3           | Framework Agreement on the Sale and Purchase of Solar Modules dated April 11, 2006, between First Solar GmbH and Conergy AG.  | S-1/A                     | 333-135574 | 11/8/06              | 10.2           |                |
| 10.4           | Amendment to the Framework Agreement dated April 11, 2006 on the Sale and Purchase of Solar Modules between First Solar GmbH and Conergy AG.  | 10-K                      | 001-33156  | 3/16/07              | 10.04          |                |
| 10.5           | Framework Agreement on the Sale and Purchase of Solar Modules dated April 5, 2006, between First Solar GmbH and Gehrlicher Umweltschonende Energiesysteme GmbH.   | S-1/A                     | 333-135574 | 11/8/06              | 10.3           |                |
| 10.6           | Amendment to the Framework Agreement dated April 5, 2006 on the Sale and Purchase of Solar Modules between First Solar GmbH and Gehrlicher Umweltschonende Energiesysteme GmbH.                         | 10-K                      | 001-33156  | 3/16/07              | 10.06          |                |
| 10.7           | Framework Agreement on the Sale and Purchase of Solar Modules dated April 9, 2006, among First Solar GmbH, Juwi Holding AG, JuWi Handels Verwaltungs GmbH & Co. KG and juwi solar GmbH.                 | S-1/A                     | 333-135574 | 11/8/06              | 10.4           |                |
| 10.8           | Amendment to the Framework Agreement dated April 9, 2006 on the Sale and Purchase of Solar Modules among First Solar GmbH, Juwi Holding AG, JuWi Handels Verwaltungs GmbH & Co. KG and juwi solar GmbH. | 10-K                      | 001-33156  | 3/16/07              | 10.08          |                |
| 10.9           | Framework Agreement on the Sale and Purchase of Solar Modules dated March 30, 2006, between First Solar GmbH and Phönix Sonnenstrom AG.   | S-1/A                     | 333-135574 | 11/8/06              | 10.5           |                |
| 10.10          | Amendment to the Framework Agreement dated March 30, 2006 on the Sale and Purchase of Solar Modules between First Solar GmbH and Phönix   | 10-K                      | 001-33156  | 3/16/07              | 10.10          |                |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|       |  |       |            |          |       |
|-------|--|-------|------------|----------|-------|
|       | Sonnenstrom AG.  |       |            |          |       |
| 10.11 | Framework Agreement on the Sale and Purchase of Solar Modules dated April 7, 2006, between First Solar GmbH and Colexon Energy AG.                 | S-1/A | 333-135574 | 11/8/06  | 10.6  |
| 10.12 | Amendment to the Framework Agreement dated April 7, 2006 on the Sale and Purchase of Solar Modules between First Solar GmbH and Colexon Energy AG. | 10-K  | 001-33156  | 3/16/07  | 10.12 |
| 10.13 | Guarantee Agreement between Michael J. Ahearn and IKB Deutsche Industriebank AG.   | S-1/A | 333-135574 | 9/18/06  | 10.7  |
| 10.14 | Grant Decision dated July 26, 2006, between First Solar Manufacturing GmbH and InvestitionsBank des Landes Brandenburg.                            | S-1/A | 333-135574 | 10/10/06 | 10.9  |
| 10.15 | 2003 Unit Option Plan.   | S-1/A | 333-135574 | 9/18/06  | 4.14  |
| 10.16 | Form of 2003 Unit Option Plan Agreement.   | S-1/A | 333-135574 | 9/18/06  | 4.15  |

**Table of Contents**

| Exhibit Number | Exhibit Description  | Incorporated by Reference |            |                      | Exhibit Number | Filed Herewith |
|----------------|--|---------------------------|------------|----------------------|----------------|----------------|
|                |  | Form                      | File No.   | Date of First Filing |                |                |
| 10.17          | 2006 Omnibus Incentive Compensation Plan.  | S-1/A                     | 333-135574 | 10/25/06             | 10.10          |                |
| 10.18          | Amended and Restated Employment Agreement dated October 31, 2006, between First Solar Inc. and Michael J. Ahearn.                          | S-1/A                     | 333-135574 | 11/2/06              | 10.22          |                |
| 10.19          | Amended and Restated Employment Agreement dated May 3, 2007, between First Solar Inc. and George A. ( Chip ) Hambro.                       | 10-Q                      | 001-33156  | 5/8/07               | 10.01          |                |
| 10.20          | Amended and Restated Employment Agreement dated October 31, 2006, between First Solar, Inc. and I. Paul Kacir.                             | S-1/A                     | 333-135574 | 11/2/06              | 10.21          |                |
| 10.21          | Employment Agreement dated October 31, 2006, between First Solar, Inc. and Jens Meyerhoff.   | S-1/A                     | 333-135574 | 11/2/06              | 10.20          |                |
| 10.22          | Employment Agreement dated March 12, 2007 between First Solar, Inc. and Bruce Sohn.  | 10-K                      | 001-33156  | 3/16/07              | 10.24          |                |
| 10.23          | Form of Change in Control Severance Agreement.   | S-1/A                     | 333-135574 | 10/25/06             | 10.15          |                |
| 10.24          | Guaranty dated February 5, 2003.   | S-1/A                     | 333-135574 | 10/25/06             | 10.16          |                |
| 10.25          | Form of Director and Officer Indemnification Agreement.  | S-1/A                     | 333-135574 | 10/25/06             | 10.17          |                |
| 10.26          | Collection and Recycling Indemnification Policy.   | S-1/A                     | 333-135574 | 10/25/06             | 10.18          |                |
| 10.27          | Amended and Restated Employment Agreement dated August 27, 2007, between First Solar, Inc. and Kenneth M. Schultz.                         | 10-Q                      | 001-33156  | 11/7/07              | 10.1           |                |
| 10.28          | Employment Agreement dated December 17, 2007 between First Solar, Inc. and John T. Gaffney.  | 10-K                      | 001-33156  | 02/28/08             | 10.28          |                |
| 10.29          | Employment Agreement dated March 31, 2008 between First Solar Inc. and James R. Miller.  | 10-Q                      | 001-33156  | 05/02/08             | 10.1           |                |
| 10.30          | Employment Agreement dated May 5, 2008 between First Solar Inc. and John Carrington.   | 10-Q                      | 001-33156  | 07/31/08             | 10.1           |                |
| 10.31          | Amended and Restated Employment Agreement and Amended and Restated Change in Control Agreement dated November 3, 2008 between First Solar, | 10-Q                      | 001-33156  | 10/31/08             | 10.01          |                |

Edgar Filing: FIRST SOLAR, INC. - Form 10-K

|       |   |      |           |          |       |
|-------|---|------|-----------|----------|-------|
|       | Inc. and Michael J. Ahearn.   |      |           |          |       |
| 10.32 | Amended and Restated Employment Agreement and Amended and Restated Change in Control Agreement dated November 3, 2008 between First Solar, Inc. and John Carrington.  | 10-Q | 001-33156 | 10/31/08 | 10.02 |
| 10.33 | Amended and Restated Employment Agreement and Amended and Restated Change in Control Agreement dated November 11, 2008 between First Solar, Inc. and Bruce Sohn.      |      |           |          | X     |
| 10.34 | Amended and Restated Employment Agreement and Amended and Restated Change in Control Agreement dated December 29, 2008 between First Solar, Inc. and John T. Gaffney. |      |           |          | X     |
| 10.35 | Amended and Restated Employment Agreement and Amended and Restated Change in Control Agreement dated December 30, 2008 between First Solar, Inc. and Jens Meyerhoff.  |      |           |          | X     |

**Table of Contents**

| Exhibit Number | Exhibit Description   | Incorporated by Reference |           |                      | Exhibit Number | Filed Herewith |
|----------------|---|---------------------------|-----------|----------------------|----------------|----------------|
|                |   | Form                      | File No.  | Date of First Filing |                |                |
| 10.36          | Employment Agreement and Change in Control Severance Agreement, each dated February 20, 2009 between First Solar Inc. and Mary Elizabeth Gustafsson.                          |                           |           |                      |                | X              |
| 14.1           | Code of Ethics  | 10-K                      | 001-33156 | 3/16/07              | 14             |                |
| 21.1           | List of Subsidiaries of First Solar, Inc.   |                           |           |                      |                | X              |
| 23.1           | Consent of Independent Registered Public Accounting Firm.   |                           |           |                      |                | X              |
| 24.1           | Power of Attorney   |                           |           |                      |                | X              |
| 31.01          | Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a), as amended   |                           |           |                      |                | X              |
| 31.02          | Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a), as amended   |                           |           |                      |                | X              |
| 32.01*         | Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002 |                           |           |                      |                | X              |

Confidential treatment has been requested and granted for portions of this exhibit.

\* This exhibit shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

(b) Financial Statement Schedule: