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SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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**FORM 10-K**

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

**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2002**

**OR**

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

For the transition period from                      to                      .

**COMMISSION FILE NUMBER 000-31687**

**EVERGREEN SOLAR, INC.**

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

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

**04-3242254**  
*(I.R.S. Employer  
Identification No.)*

**259 CEDAR HILL STREET  
MARLBORO, MASSACHUSETTS**  
*(Address of principal executive offices)*

**01752**  
*(Zip Code)*

Registrant's telephone number, including area code: 508-357-2221

Securities registered pursuant to Section 12(b) of the Act: NONE

Securities registered pursuant to Section 12(g) of the Act: COMMON STOCK, PAR VALUE \$.01 PER SHARE

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 the 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 an accelerated filer (as defined in Exchange Act Rule 12b-2).

Yes ☐    No ☒

As of February 27, 2003, there were 11,410,826 shares of the registrant's Common Stock, \$.01 par value per share, outstanding. The aggregate market value of the registrant's voting stock held by non-affiliates as of June 28, 2002 was approximately \$15 million.

## **DOCUMENTS INCORPORATED BY REFERENCE**

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2002. Portions of such proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

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## **TABLE OF CONTENTS**

### **PART I**

**ITEM 1. BUSINESS:**

**ITEM 2. PROPERTIES:**

**ITEM 3. LEGAL PROCEEDINGS:**

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS:**

### **PART II**

**ITEM 5. MARKET FOR THE COMPANY'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS:**

**ITEM 6. SELECTED FINANCIAL DATA:**

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS:**

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK:**

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA:**

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE:**

### **PART III**

**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT:**

**ITEM 11. EXECUTIVE COMPENSATION:**

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT:**

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS:**

**ITEM 14. CONTROLS AND PROCEDURES:**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K:**

### **SIGNATURES**

#### **POWER OF ATTORNEY AND SIGNATURES**

**Ex-21.1 Subsidiaries of the Registrant**

**Ex-23.1 Consent of PricewaterhouseCoopers LLP**

**Ex-99.1 Section 906 Certification**

**Ex-99.2 Section 906 Certification**

## **PART I**

### **ITEM 1. BUSINESS:**

#### **OVERVIEW**

We develop, manufacture and market solar power products that are capable of providing reliable and environmentally clean electric power throughout the world. Our solar power products are targeted at the global solar power market. We believe our proprietary and patented solar power technologies, including our String Ribbon™ technology, will offer significant design, cost and manufacturing advantages over competing solar power technologies. We intend to become a leading producer of high-quality solar power products by expanding our manufacturing capacity, reducing our manufacturing costs, developing innovative solar power products, increasing our distribution capabilities and pursuing strategic relationships.

Since our formation in 1994, we have conducted research and development of advanced process and product technologies and, between 1997 and June 2001, we used pilot manufacturing facilities to refine our solar power products and manufacturing processes. Also in 1997, we began shipping small quantities of commercial products. In 2001, we expanded our manufacturing capacity by relocating our operations to a 56,250 square foot facility in Marlboro, Massachusetts. We are continuing to refine, develop and commercialize a number of laboratory-demonstrated advancements in our solar power technologies, including advanced String Ribbon crystal growth, more efficient solar cells and improved solar panel designs. Through December 31, 2002, we shipped almost 30,000 solar panels for residential, commercial and industrial applications in the United States and internationally. As we continue to increase production volumes, we intend to actively expand existing and seek new distribution and marketing arrangements.

#### **FINANCING TRANSACTION**

On March 21, 2003 we entered into the Stock and Warrant Purchase Agreement with Perseus 2000, L.L.C., Nth Power Technologies Fund II, LP, Nth Power Technologies Fund II-A, LP, RockPort Capital Partners, L.P., RP Co-Investment Fund, I, Micro-Generation Technology Fund, LLC, UVCC Fund II, UVCC II Parallel Fund, L.P., Caisse de dépôt et placement du Québec, CDP Capital – Technology Ventures U.S. Fund 2002 L.P., Beacon Power Corporation, Massachusetts Technology Park Corporation, Zero Stage Capital VII, L.P., Zero Stage Capital (Cayman) VII, L.P., Zero Stage Capital SBIC VII, L.P., IMPAX Environmental Markets plc, Merrill Lynch New Energy Technology Fund, MLIIF New Energy Fund, PNE Invest Limited, Odyssey Fund, SAM Private Equity Energy Fund LP, SAM Sustainability Private Equity LP and SAM Smart Energy pursuant to which we have agreed to issue, and the purchasers have agreed to purchase from us, \$29,375,000 of Series A convertible preferred stock at a per share purchase price to be calculated as of the closing date. The per share purchase price to be paid for the shares of Series A convertible preferred stock will be 85% of the 60-day trading average closing price of our common stock for the period ending two trading days prior to the closing date of the private placement. However, in no event will the per share price exceed \$1.12 (which is 85% of the 60-day trading average of the closing bid prices of our common stock for the period ending on March 17, 2003), or be less than \$0.68. Additionally, we agreed to issue, and Beacon Power Corporation agreed to purchase for a purchase price of \$100,000, a warrant to purchase 2,400,000 shares of common stock at an exercise price equal to the per share purchase price of the Series A convertible preferred stock paid by the purchasers, plus \$2.25. The shares of Series A convertible preferred stock will be initially convertible into shares of common stock on a 1-to-1 basis (subject to adjustment to account for the payment of dividends, to take into account certain changes to our capital structure and to account for future dilutive issuances). Depending upon the final per share price paid by the purchasers for such shares, the Series A convertible preferred stock will, when issued, represent between 70% and 79% of the currently issued and outstanding shares of our capital stock. The closing of the transactions contemplated by the purchase agreement is subject to certain conditions, including, among other things, obtaining stockholder approval. If approved by stockholders, it is anticipated that the closing of the private placement would occur as soon as practicable thereafter.

#### **Interest of Certain Persons in the Matter to Be Acted Upon**

Micro-Generation Technology Fund, LLC, UVCC Fund II, and UVCC II Parallel Fund, L.P., each of which is an investment entity affiliated with Dr. Robert W. Shaw, Jr., the chairman of our board of directors, have agreed to invest \$3.5 million in the aggregate in the private placement in return for shares of Series A convertible preferred stock on terms identical to those afforded to each other purchaser, except that Arete Corporation, as one of the five purchasers who signed the initial term sheet with respect to the private placement, will have the right to designate a member of our board of directors and will be eligible to receive a break-up fee under certain circumstances if the private placement does not close. Dr. Shaw is the President of Arete Corporation, which is the manager of Micro-Generation Technology Fund, LLC. Dr. Shaw is a general partner of Arete Venture Investors II, L.P., which is the general partner of UVCC Fund II. Dr. Shaw is also a general partner of Arete Ventures III, L.P., which is the general partner of UVCC II Parallel Fund, L.P. As of March 1, 2003, these entities and others affiliated with Dr. Shaw owned an aggregate of 840,453 shares of our common stock and Dr. Shaw, together with his wife, owned an aggregate of 112,699 additional shares of our common stock in their individual capacities. If the private placement is approved by our stockholders, and if the private placement is consummated, Arete Corporation intends to designate Dr. Shaw as its designee to our board of directors.

Dr. Shaw is a limited partner of Nth Power Management II, L.P., the general partner of Nth Power Technologies Fund II, LP, and in such capacity provides advice as requested to this entity. Dr. Shaw does not serve on this entity's investment committee nor does he have any

decision making authority with respect thereto. Dr. Shaw has also agreed to become a member of, and perform comparable services for, Nth Power Management II-A, LLC, the general partner of Nth Power Technologies Fund II-A, L.P., and will have a similar advisory role with that entity. As of March 1, 2003, Nth Power Technologies Fund, I, L.P., an investment entity affiliated with Nth Power, LLC owned 1,016,914 shares of our common stock. Nth Power Technologies Fund II, LP and Nth Power Technologies Fund II-A, LP, each of which is an investment entity affiliated with Nth Power Management II, L.P. and Nth Power Management II-A, LLC, have agreed to invest \$4 million in the aggregate in the private placement in return for shares of Series A convertible preferred stock on terms identical to those afforded to each other purchaser, except that Nth Power Technologies Fund II, LP, as one of the five purchasers who signed the initial term sheet with respect to the private placement, will have the right to designate a member of our board of directors and will be eligible to receive a break-up fee under certain circumstances if the private placement does not close. Dr. Shaw did not participate in the decision of either of the two Nth Power-related entities to invest in the private placement. Nth Power Technologies Fund II, LP intends to designate Timothy Woodward, a Managing Director of Nth Power, LLC, as its designee to our board of directors.

Dr. Shaw serves as a member of the investment committee of SAM Private Equity Energy Fund L.P. and SAM Sustainability Private Equity Fund L.P. and he has a limited partnership interest in SAM Private Equity Energy Fund L.P. These entities and another affiliated entity, SAM Smart Energy, have agreed to invest \$3.25 million in the aggregate in the private placement in return for shares of Series A convertible preferred stock on terms identical to those afforded to each other purchaser. Dr. Shaw recused himself and did not participate in the SAM investment committee decisions to invest in the private placement.

Dr. Shaw has no voting power or dispositive power over any Evergreen shares held by the Nth Power investment entities or the SAM investment entities.

Dr. Shaw, as a result of his relationships with investors in the private placement as described above, may have interests in the private placement that are different from those of other Evergreen stockholders. Dr. Shaw is not a member of, and did not participate in, any meetings of our financing committee that negotiated the private placement and did not participate in any discussions with the purchasers concerning the terms of the private placement.

Mason Willrich, one of our directors, was previously affiliated with Nth Power, LLC. From 1996 through December 1999, Mr. Willrich served as a Principal of Nth Power, LLC, a managerial role that entails reviewing investment candidates and participating in day-to-day operations management, and from January 2000 through February 2002, he was a Special Limited Partner of Nth Power, LLC an advisory role that entailed reviewing investment candidates and providing insights into market trends and opportunities. As of March 1, 2003, Mr. Willrich, together with his wife and a trust entity of which he is the sole trustee, owned an aggregate of 19,503 shares of our common stock. If the private placement is approved by our stockholders, and if the private placement is consummated, Mr. Willrich intends to resign from our board.

Mr. Willrich, as a result of his relationship with an investor in the private placement as described above, may have interests in the private placement that are different from those of other Evergreen stockholders. Mr. Willrich was not a member of, and did not participate in, any meetings of our financing committee that negotiated the terms of the private placement and did not participate in any discussions with the purchasers concerning the terms of the private placement.

## HISTORICAL MILESTONES

We were incorporated in August 1994 and, to date, we have achieved the following milestones along our product development and commercialization schedule:

Date		Historical Milestone
October	1994	Evergreen Solar founded with four employees in a 2,500 square foot laboratory.
October	1995	First String Ribbon wafers produced.
April	1997	9,400 square foot pilot manufacturing facility operational.
October	1997	First commercial sale of solar panels produced using String Ribbon technology.
June	1999	Total sales of solar panels of 2,500 units and 100 kilowatts achieved.
December	1999	Kawasaki investment of \$5 million and execution of a strategic distribution and marketing agreement.
March	2000	Leased 56,250 square foot manufacturing and headquarters facility located in Marlboro, Massachusetts.
August	2000	Renovation of our Marlboro manufacturing facility and headquarters begun.
June	2001	First shipment of solar panels from our new Marlboro manufacturing facility.
November	2001	New distribution relationships in the U.S. and Europe.
December	2001	Shipment of our 10,000 <sup>th</sup> solar panel.
June	2002	Achieved first quarterly \$1.0 million in product sales.
December	2002	Demonstration of double ribbon growth to boost productivity.
December	2002	Solar system installed on White House.

## INDUSTRY BACKGROUND

The electric power industry is one of the world's largest industries. Furthermore, electricity accounts for a growing share of overall energy use. We believe that deregulation and technological innovations are creating significant opportunities for new entrants and technologies within the electric power industry, just as these changes have created similar opportunities in other regulated industries such as telecommunications, banking and transportation.

We believe that distributed generation is one of the most promising areas for growth in the global electric power industry. Distributed generation is defined as point-of-use electricity generation that either supplements or bypasses the electric utility grid, and employs technologies such as solar power, microturbines and fuel cells. Distributed generation is expected to provide greater portability, reliability, power quality and user control. We believe capacity constraints, increased demand for power reliability and quality, and new environmental initiatives will drive the demand for distributed generation.

We further believe that environmentally benign, locally sourced power generation will become increasingly more important for economic development, environmental policy, and national security. Increasing attention to global warming, global energy policy, and regional stability and development will support the deployment of distributed generation, particularly renewable energy.

## SOLAR POWER APPLICATIONS AND BENEFITS

Unlike many other distributed generation technologies that have been under development but not in widespread commercial use, solar power technology has had a growing worldwide market for over 25 years in the following applications:

- *On-grid.* On-grid applications provide supplemental electricity to customers that are served by an electric utility grid but choose to generate a portion of their electricity needs on-site. On-grid applications have been the fastest growing part of the solar power market, largely driven by the worldwide trend toward deregulation and privatization of the electric power industry as well as by government initiatives, including incentive programs to subsidize and promote solar power systems in several countries including Japan, Germany and the United States. On-grid applications include residential and commercial rooftops and building facades and are available for both new construction and existing structures.
- *Off-grid.* Off-grid applications serve markets where access to conventional electric power is not economical or physically feasible. Solar power products can provide a cost-competitive, reliable alternative for powering highway call boxes, microwave stations, portable highway road signs, remote street or billboard lights, vacation homes, rural homes in developed and developing countries, water pumps and battery chargers for recreational vehicles and other consumer applications.

Solar power has emerged as one of the primary distributed generation technologies seeking to capitalize on the opportunities resulting from trends affecting the electric power industry. Relative to other distributed generation technologies, solar power benefits include:

- *Modular and scalable.* From tiny solar cells powering a hand-held calculator to an array of roof panels powering an entire home to acres of panels on a commercial building roof or field, solar power products can be deployed in many sizes and configurations and can be installed almost anywhere in the world. Solar is among the best technologies for power generation in urban areas, environmentally sensitive areas, and geographically remote areas in both developing and developed countries.
- *Reliable.* With no moving parts and no fuel supply required, solar power systems reliably power some of the world's most sensitive applications, from space satellites to microwave stations in the mountains and other remote, harsh environments. Solar panels typically carry warranties as long as 25 years.
- *Dual use.* Solar panels are expected to increasingly serve as both a power generator and the skin of the building. Like architectural glass, solar panels can be installed on the roofs or facades of residential and commercial buildings.
- *Environmentally cleaner.* Solar power systems consume no fuel and produce no air or water emissions.

## THE SOLAR POWER CHALLENGE

Although solar power has been technically proven for over 25 years and is widely cost-effective for off-grid applications, we believe the principal challenge to widespread adoption of solar power is reducing manufacturing costs without impairing product performance or reliability. We believe the following advancements in solar power technology are necessary to meet this challenge:

- *Efficient material use.* Reduce raw materials waste, particularly the waste associated with slicing silicon blocks by conventional crystalline silicon technology.
- *Simplified and continuous processing.* Reduce reliance on expensive, multi-step manufacturing processes.
- *Improved product design and performance.* Increase product conversion efficiency, longevity and ease of use. Conversion efficiency refers to the fraction of the sun's energy converted to electricity.

We further believe the two principal solar power technologies, crystalline silicon and thin films, have not adequately addressed this challenge:

*Crystalline Silicon.* Crystalline silicon technology was the earliest practiced solar power technology and remains the foundation for most solar power applications. Conventional crystalline silicon technology involves slicing thin wafers from solid crystalline silicon blocks. Crystalline silicon products are known for their reliability, performance and longevity; however, factors such as high materials waste from slicing, and multi-step processing procedures have limited the ability of conventional crystalline silicon manufacturers to reduce manufacturing costs.

*Thin Films.* While most major solar power manufacturers currently rely on crystalline silicon technology for the majority of their solar cell production, many are also developing alternative thin film technologies to achieve lower manufacturing costs. Thin film technology involves depositing several thin layers of silicon or more complex materials on a substrate to make a solar cell. Although thin film techniques may be able to use material more efficiently than conventional crystalline silicon, we believe the commercial acceptance of thin film technology is limited due to higher capital costs, lower manufacturing yields, lower conversion efficiency, reduced product performance and reliability, and, in some cases, concerns with toxic materials. Recent curtailments of R&D programs as well as plant closures by some industry participants, most notably BP Solar in 2002, highlight the commercial challenges that thin films have faced.

## OUR TECHNOLOGY SOLUTION

We believe our technologies and processes are unique among our competitors. Both our technologies and processes have been designed to reduce manufacturing costs while improving product design. We are developing technology at the wafer, cell and panel stages of manufacturing, and we hold patents and other intellectual property in all three areas. Our String Ribbon wafer manufacturing technology is our core technology and we believe it offers a substantial opportunity to reduce cost and otherwise advance our business through reduced materials cost, simpler processing and lower required economies of scale.

In the String Ribbon technique, strings are pulled vertically through a shallow pool of molten silicon, and the silicon solidifies between the strings to form a continuous ribbon of crystalline silicon. The ribbon is then cut and prepared for cell fabrication. The use of strings to aid in the simplified growth of a silicon ribbon is what distinguishes our proprietary and patented String Ribbon technology from other advanced crystalline silicon wafer technologies that do not involve slicing. We believe our String Ribbon technology for the growth of solar wafers has the following significant advantages:

- *Efficient materials use.* Unlike conventional bulk crystalline silicon wafer technology, in which solid blocks of silicon are sliced into thin wafers at significant expense and silicon waste, our technology grows a continuous, flat ribbon to the desired thickness. Since our technology does not involve slicing solid blocks, we can use approximately half as much silicon as conventional crystalline silicon techniques and we believe we can reduce this amount to about one-fifth in the future through production of thinner wafers.
- *Continuous processing.* Our technology permits the continuous growth of crystalline silicon ribbon, which can lead to high automation, efficient equipment use and improved productivity.
- *Modularity.* String Ribbon furnaces individually have a capacity of approximately 0.5 megawatts per year, whereas conventional bulk technology typically has an individual machine capability of 3 megawatts per year, and the trend has been to increase minimum unit size in recent years. We expect that this modularity may enable us to achieve economies of scale at a smaller scale than conventional technologies, which could enable us to manufacture internationally in more numerous, smaller factories to better serve global markets.

In addition to String Ribbon, we are developing and have patented advanced approaches in cell and panel fabrication, including a technique to produce “wrap-around” or back-contact solar cells, monolithic integration and polymer-framed modules. While these technologies are not yet in commercial production, they present an opportunity to further reduce cost and improve products by simplifying processes and reducing materials use.

## OUR PRODUCTS

Solar power products in general are built-up through four stages of production:

- *Wafers.* A crystalline silicon wafer is a flat piece of crystalline silicon that can be processed into a solar cell. Our rectangular wafers currently measure 81 millimeters by 150 millimeters and are approximately as thick as a business card.
- *Cells.* A solar cell is a device made from a wafer that converts sunlight into electricity by means of a process known as the photovoltaic effect. Our solar cells produce approximately 1.5 watts of power each.
- *Panels.* A solar panel is an assembly of solar cells that have been electrically interconnected and laminated in a physically durable and weather-tight package. A typical solar panel can produce from 20 to 150 watts of power and range in size from two to 15 square feet. A 100-watt solar panel can power a standard 100-watt light bulb, or approximately 3% of the power requirements of a typical home in the United States. Our current solar panels range from 47 to 110 watts in power.
- *Systems.* A solar system is an assembly of one or more solar panels that have been physically mounted and electrically interconnected, often with batteries and/or power electronics, to produce electricity. Typical residential on-grid systems contain between 10-40 panels and produce 1-4 kW.

We sell primarily solar panels, although we may in the future also sell wafers, cells, or systems. We believe our panels are competitive with other products in the marketplace, and some customers have commented that our panels have benefits regarding appearance, electrical design capability, and ease of use.

Our solar panels are certified to international standards for safety and quality. If our development programs are successful, we expect to continue to increase the conversion efficiency and power of our solar panels as we expand our manufacturing capacity.



## SALES AND MARKETING

### *Market Focus*

We intend to primarily target the on-grid markets and the off-grid rural electrification market, where we believe growth prospects are the largest and where we expect our solar power technology will provide us the greatest competitive advantage. These markets are characterized as follows:

- *On-grid.* The on-grid market is currently the fastest growing solar power market within which, we are focused primarily on U.S. and European markets.
- *Off-grid rural electrification.* Within the off-grid market, we believe that rural electrification has the largest potential but is the least penetrated market as evidenced by the two billion people in the world without conventional electricity. Marketing, financing, local infrastructure and support are projected to remain the principal challenges to greater expansion of this market. To date, we have primarily pursued sales in Central and South America and the Pacific Rim.

Since inception, over 80% of our sales have been to on-grid market segments, and over 50% of our sales have been exported from the U.S. The majority of our export sales to date have been to Europe.

### *Distribution, Marketing and Other Strategic Relationships*

We bring our solar power products to market using distributors, system integrators and other value-added resellers. Our resellers often add value through system design by incorporating our panels with batteries, associated electronics, structures and wiring systems. Most of our resellers have a geographic or applications focus. Our channel partners include companies that are exclusively solar distributors as well as others for whom solar power is an extension of their core business, such as, engineering design firms or other energy product marketers.

We expect to collaborate closely with a relatively small number of resellers throughout the world. We currently have less than 50 distributors worldwide and are actively adding new accounts and channel partners. Our distribution partners include Kawasaki Heavy Industries, a Japanese engineering and construction company, Hutton Communications, a leading marketer and distributor of wireless telecommunications and power products in North America, and Krannich Solartechnik, a marketer and distributor of photovoltaic modules and systems in Germany.

We intend to selectively pursue additional strategic relationships with other companies worldwide for the joint marketing, distribution and manufacturing of our products. These resellers are expected to range from large, multinational corporations to small, development-stage companies, each chosen for their particular expertise. We believe that these relationships will enable us to leverage the marketing, manufacturing and distribution capabilities of other companies, explore opportunities for additional product development, and more easily and cost-effectively enter new geographic markets, attract new customers and develop advanced solar power applications.

We currently work with a relatively small number of reseller partners who have particular expertise in a selected geographic or applications market segment. Sales to our ten largest resellers have accounted for approximately 90% of our total product revenues since inception. No single reseller has accounted for more than 45% of total revenues over that period. As we continue to expand manufacturing capacity and sales volumes, we anticipate developing relationships with additional resellers. During fiscal year 2002, approximately 32% of our product sales were made to resellers in the United States, and all of our research revenue was generated within the United States. During the same period, revenue from the National Institute of Industry Standards, the National Renewable Energy Laboratory, and Krannich Solartechnik accounted for 11%, 10% and 44% of total revenues, respectively.

In addition, we market our products through trade shows, on-going customer communications, promotional material, our web site, direct mail and advertising. Our staff provides customer service and applications engineering support to our distribution partners while also gathering information on current product performance and future product requirements. Our internal sales force currently handles all solar power product sales. During 2002, we brought on board a North American Sales Manager based in Marlboro, Massachusetts, as well as a European Sales Manager based in Munich, Germany.

## MANUFACTURING

Our principal manufacturing objective is to provide for large-scale manufacturing of our solar power products at low costs that will enable us to penetrate price-sensitive solar power markets. In March 2000, we signed a lease agreement for a 56,250 square foot facility in Marlboro, Massachusetts, which includes approximately 35,000 square feet of manufacturing space.

This facility includes a complete line of equipment to manufacture String Ribbon wafers, fabricate and test solar cells, and laminate and test panels. The first of the facility's two planned manufacturing lines entered service in 2001. During 2002, we initiated the design and construction of the second production line in our Marlboro facility. At the end of 2002, installation and construction of equipment for parts of the cell processing and module fabrication operations neared completion.

In addition to our current investment in our Marlboro, Massachusetts facility, we intend to selectively pursue opportunities to establish local manufacturing arrangements on a worldwide basis. Because the market opportunity for solar power encompasses numerous applications in both developed and developing nations worldwide, we expect a significant portion of our sales will be made outside of the United States. Despite these opportunities, manufacturing of solar power products has remained largely concentrated in the United States, Europe and Japan due to factors such as reduced economies of scale and technical process complexities of establishing local manufacturing facilities.

In spite of these barriers, we believe there are several advantages to local manufacturing, including enhanced brand recognition in local markets, avoidance of import tariffs and access to local private or public sector financing. We believe that our String Ribbon technology and our innovative manufacturing techniques offer greater advantages than other competing technologies, which we believe will enable us to establish fully integrated factories at a smaller scale that can better grow in concert with market demands. Consequently, we expect to pursue local manufacturing of our products in selected target markets. We also expect that our technologies will allow us to efficiently scale our production to take advantage of market opportunities as they arise.

## RESEARCH AND DEVELOPMENT

Because we believe continuously improving our technology is an important part of our overall strategy, we have maintained and intend to maintain a strong research and development effort. To this end, our Marlboro, Massachusetts facility has approximately 6,000 square feet dedicated to research and development and contains equipment to support the development, fabrication and evaluation of new solar power products and technologies.

We intend to continue our policy of selectively pursuing contract research, product development and market development programs funded by various agencies of the United States, state and international governments to complement and enhance our own resources. The percentage of our total revenues derived from government-related contracts was approximately 21% for the year ended December 31, 2002. We currently have two active research contracts with total estimated revenues of approximately \$5.0 million, \$2.75 million of which has been authorized by the sponsoring agencies and \$2.1 million of which has been recorded as revenue as of December 31, 2002. We expect the remaining \$2.9 million of revenue will be recognized over the remaining life of each of the contracts, which expire on October 31, 2003 and May 31, 2005.

These and other research contracts we have obtained generally provide for development of advanced materials and methods for wafer, cell and panel manufacturing, product development and market development. In all cases to date, we retain all rights to any intellectual property and technological developments resulting from the government funding, with the exception of government "march-in" rights to practice the technology on its own behalf and certain rights universities retain for work they perform under subcontract to us. These contracts usually require the submission of technical progress reports, most of which may become publicly available. These contracts are generally cost-shared between the funding agency and us with our share of the total contract cost historically ranging from approximately 30% to 70%. The contracts normally expire between six months and three years from their initiation. We have recognized research revenues of \$1.8 million in 2000, \$932,000 in 2001, and \$1.4 million in 2002 from several government-sponsored research contracts. We have recorded research and development expenditures, including the cost of research revenue, of \$3.3 million in 2000, \$2.9 million in 2001 and \$3.6 million in 2002. The following table summarizes research revenues received from various government agencies as a percentage of total revenues:

	2000	2001	2002
Commonwealth of Massachusetts	10%	0%	0%
National Institute of Standards and Technology	20%	24%	11%
National Renewable Energy Laboratory	49%	15%	10%
	79%	39%	21%

## INTELLECTUAL PROPERTY RIGHTS

### *Patents*

We believe that our commercial success will significantly depend on our ability to protect our intellectual property rights underlying our proprietary technologies. We seek United States and international patent protection for major components of our technology platform, including our crystalline silicon wafers, solar cells and solar panels. We own or have licensed 19 issued United States patents and 2 issued foreign patents in the solar power field, which expire beginning in 2003 and ending in 2019. In addition, we have 7 United States patent applications pending. We decide whether and in what foreign countries to file counterparts of our United States patent applications. We devote substantial resources to building a strong patent position, and we intend to continue to file additional United States and foreign patent applications to seek protection for technology we deem important to our commercial success.

*Crystalline Silicon Wafers.* Dr. Emanuel Sachs, a tenured Professor of Mechanical Engineering at the Massachusetts Institute of Technology, developed our core String Ribbon technology. Dr. Sachs has been awarded three issued United States patents for the String Ribbon technology. An additional issued patent for a related technology, invented by two employees of the United States National Renewable Energy Laboratory, formerly the Solar Energy Research Institute, was assigned to Dr. Sachs in 1984.

In September 1994, Dr. Sachs granted us an irrevocable, worldwide, royalty-bearing license to practice the String Ribbon technology and related patents under a license and consulting agreement. The patents underlying this agreement begin to expire in 2003. This agreement permits us to sublicense any of our license and other rights under the agreement. The license is exclusive worldwide, subject only to nonexclusive, nontransferable rights held by the United States Department of Energy to practice the String Ribbon technology on its own behalf. Dr. Sachs continues to actively consult with Evergreen Solar on new technological developments.

We have been awarded 3 issued United States patents and have filed 5 patent applications on our own, internally-developed inventions related to String Ribbon and wafer fabrication, which are method inventions relating to automated, high-yield production techniques.

*Solar Cell Fabrication.* We have been awarded 5 issued United States patents relating to our solar cell processing technology. The issued United States patents relate to the method for forming wrap-around contacts on solar cells and a method for processing solar cells.

*Solar Panels.* We have been awarded 7 issued United States patents and have filed 2 additional United States patent applications relating to advanced solar panel designs. The 7 issued United States patents relate to solar cell modules with an improved backskin, solar cell modules with an interface mounting system, an encapsulant material for solar cell modules and a solar cell roof tile system. The pending patent applications relate to new materials for encasing the panel, which we believe will lower cost, extend panel life and enhance panel performance.

The long-term status of patents in our industry, as well as others, are generally uncertain and involve complex legal and factual questions. Furthermore, even if patents are licensed or issued to us, others may design around the patented technologies. In addition, we could incur substantial costs in litigation if we are required to initiate patent litigation to enforce our patent rights, and the outcome of any patent litigation is uncertain. The following may impair our patent positions:

- our pending patent applications may not result in issued patents;
- the claims of patents which are issued may not provide meaningful protection;
- we may not develop additional proprietary technologies that are patentable;
- patents licensed or issued to us may not provide a basis for commercially viable products or may not provide us with competitive advantages and may be challenged by third parties; or
- patents of others may have an adverse effect on our ability to do business.

Although we do not believe that our technologies infringe the rights of third parties, third parties could in the future assert infringement claims against us, which may result in costly litigation or require us to obtain a license to third-party intellectual property rights. We may be unable to obtain required licenses or obtain these licenses on terms that are acceptable to us, either of which would substantially impair our business.

With respect to proprietary know-how that is not patentable and for processes for which patents are difficult to enforce, we rely on trade secret protection and confidentiality agreements to protect our interests. We believe that several elements of our solar power products and manufacturing processes involve proprietary know-how, technology or data, which are not covered by patents or patent applications including selected materials, technical processes, equipment designs, algorithms and procedures. We have taken security measures to protect proprietary know-how and technologies and confidential data, and we continue to explore additional methods of protection. While we require all employees, key consultants and other third parties to enter into confidentiality agreements with us, we cannot be assured that proprietary information will not be disclosed inappropriately, that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets, or that we can meaningfully protect our trade secrets. Any material leak of confidential information into the public domain or to third parties could result in the loss of a competitive advantage in the solar power market.

## **COMPETITION**

The market for solar power products is intensely competitive. There are over 20 companies in the world that produce solar power products, including BP Solar, Kyocera Corporation, Royal Dutch Shell, Sharp Corporation, and AstroPower, Inc. All of these solar power product producers, as well as several others, have historically derived all or a majority of their solar power product sales from conventional manufacturing technology that involves using wafers made from slicing solid blocks of crystalline silicon. In addition, some of these companies are developing advanced crystalline silicon or thin film technologies, including technologies such as advanced crystalline sheet and ribbon technologies and thin films of amorphous silicon, cadmium telluride and copper indium diselenide, and project future cost savings similar to or greater than ours. We believe several of our competitors are developing and are currently producing products based on crystalline silicon wafer technologies that, like String Ribbon, do not involve slicing silicon blocks.

We believe the technologies used in our current solar power products have some similarities with those employed in our competitors' products. However, because our solar power products are made from crystalline silicon, we believe they may be more reliable than those made from thin film technologies which often use materials, such as amorphous silicon, which we believe may be less stable.

Solar power has certain advantages and disadvantages when compared to other conventional energy sources. The advantages include the ability to deploy products in many sizes and configurations, to install products almost anywhere in the world, to provide reliable power for many applications, to serve as both a power generator and the skin of a building and to eliminate air, water and noise emissions. However, unlike most conventional energy generators, which can produce power on demand, solar power cannot generate power when sunlight is not available. In addition, based on current technology, the upfront cost, including installation, of conventional energy generators is often lower than that of solar power products. However, we believe that the relative cost of power produced over the lifetime of solar products as compared with conventional energy generators often depends on the application. For example, solar power products may be more cost-effective over the long-term for remote applications that are not connected to the utility grid and that have smaller power requirements, while conventional power sources may be more cost effective for larger, grid-connected applications.

Many of our competitors have substantially greater financial resources, research and development staff, manufacturing facilities, sales and marketing experience, distribution channels and human resources than we do. In order to compete effectively against these companies, we will need to demonstrate to potential customers and partners that our solar power products perform better, or are less expensive than those of our competitors.

In addition, we believe that the market for solar power specifically, and electric power in general, may be subject to rapid technological development. This rapid development may result in some of our solar power products becoming obsolete before we can recover development expenses. We also expect that future competition will come not only from existing competitors, but also from new entrants to the market with new technological solutions. We may be unable to compete successfully against present and future competitors and our failure to successfully compete could significantly reduce our market share, our revenues and our prospects for profitability.

## **ENVIRONMENTAL REGULATIONS**

We use, generate and discharge toxic, volatile or otherwise hazardous chemicals and wastes in our research and development and manufacturing activities. We are subject to a variety of federal, state and local governmental regulations

related to the storage, use and disposal of hazardous materials. If we fail to comply with present or future environmental regulations, we could be subject to fines, suspension of production or a cessation of operations.

We believe that we have all environmental permits necessary to conduct our business. We believe that we have properly handled our hazardous materials and wastes and have not contributed to any contamination at any of our past or current premises. We are not aware of any environmental investigation, proceeding or action by federal or state agencies involving our past or current facilities. Any failure by us to control the use of or to restrict adequately the discharge of hazardous substances could subject us to substantial financial liabilities, operational interruptions and adverse publicity, any of which could materially and adversely affect our business, results of operations and financial condition. In addition, under some federal and state statutes and regulations, a governmental agency may seek recovery and response costs from operators of property where releases of hazardous substances have occurred or are ongoing, even if the operator was not responsible for the release or otherwise was not at fault.

## **EMPLOYEES**

As of December 31, 2002, we had 132 full-time employees, including 16 engaged in research and development and 105 engaged in manufacturing. Nineteen of our employees have advanced degrees, including 4 with Ph.D.s. None of our employees are represented by any labor union nor are they organized under a collective bargaining agreement. We have never experienced a work stoppage and believe that our relations with our employees are good.

## **WEBSITE**

Our Internet address is [www.evergreensolar.com](http://www.evergreensolar.com).

## **ITEM 2. PROPERTIES:**

Our headquarters is currently located in a leased space in Marlboro, Massachusetts, where we currently occupy approximately 56,250 square feet of administrative, laboratory and manufacturing space. Our lease expires on June 30, 2010.

## **ITEM 3. LEGAL PROCEEDINGS:**

We are not a party to any material legal proceedings.

## **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS:**

No matters were submitted to a vote of security holders during the quarter ended December 31, 2002.

## PART II

### ITEM 5. MARKET FOR THE COMPANY'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS:

#### *Market for Our Common Stock*

Our common stock is traded on the Nasdaq National Market under the symbol "ESLR". The following table sets forth for the calendar periods indicated, the high and low sales price of our common stock on the Nasdaq National Market.

	High	Low
<b>2001:</b>		
First Quarter	\$13.63	\$6.38
Second Quarter	\$15.00	\$8.17
Third Quarter	\$11.00	\$3.25
Fourth Quarter	\$ 3.90	\$1.90
<b>2002:</b>		
First Quarter	\$ 4.79	\$2.06
Second Quarter	\$ 3.48	\$1.32
Third Quarter	\$ 1.70	\$0.65
Fourth Quarter	\$ 1.68	\$0.44

On February 27, 2003 there were approximately 132 stockholders of record of our common stock. We have never declared or paid cash dividends. If the proposed financing is consummated, holders of shares of Series A convertible preferred stock will be entitled to a quarterly dividend at an annual rate of 10% payable in cash or, at our option, we may accrete the Series A convertible preferred stock 10% dividend to the conversion price and liquidation preference of the series A convertible preferred stock. Apart from the dividend on the Series A convertible preferred stock, we intend to retain any earnings for use in our business.

#### *Use of Proceeds*

On October 31, 2000, the Securities and Exchange Commission declared effective our registration statement on Form S-1 (file number 333-43140), relating to the initial public offering of 3,000,000 shares of our common stock, \$.01 par value per share, at a price to the public of \$14.00 per share. The offering commenced on November 2, 2000 and closed on November 7, 2000. The managing underwriters of the offering were Banc of America Securities LLC, CIBC World Markets and FAC/Equities. The aggregate offering price to the public of the initial public offering was \$42.0 million. The proceeds to us, net of underwriting discounts and commissions of \$2.9 million and offering expenses of \$1.3 million, were approximately \$37.7 million. Through December 31, 2002, approximately \$29.2 million of the net offering proceeds was spent, of which \$7.7 million was spent on capital equipment and the remainder on general operations. We have invested all of such proceeds in investment grade, interest-bearing securities. Other than for compensation and reimbursement of expenses incurred in the normal course of business, none of the net proceeds from the offering were used to pay, directly or indirectly, directors, officers, persons owning ten percent or more of our equity securities, or affiliates.

## ITEM 6. SELECTED FINANCIAL DATA:

You should read the data set forth below in conjunction with our financial statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” appearing elsewhere in this filing. The statement of operations data presented below for the fiscal years ended December 31, 2000, 2001, and 2002 and the balance sheet data at December 31, 2001, and 2002 have been derived from our financial statements which have been audited by PricewaterhouseCoopers LLP, independent accountants, and which appear elsewhere in this filing. The statement of operations data presented below for the years ended December 31, 1998 and 1999, and the balance sheet data at December 31, 1998, 1999 and 2000 have been derived from our financial statements that have been audited by PricewaterhouseCoopers LLP and are not included in this filing.

	Year Ended December 31,				
	1998	1999	2000	2001	2002
(in thousands, except for per share data)					
<b>STATEMENT OF OPERATIONS DATA:</b>					
Product revenues	\$ 163	\$ 189	\$ 419	\$ 1,546	\$ 5,296
Research revenues	1,395	2,113	1,753	932	1,448
Total revenues	1,558	2,302	2,172	2,478	6,744
Operating Expenses:					
Cost of product revenues	955	997	2,795	9,649	12,405
Research and development expenses, including cost of research revenues	2,373	3,091	3,382	3,063	3,692
Selling, general and administrative expenses	917	1,309	2,505	4,088	4,520
Total operating expenses	4,245	5,397	8,682	16,800	20,617
Operating loss	(2,687)	(3,095)	(6,510)	(14,322)	(13,873)
Net interest income	165	163	1,305	1,845	674
Net loss	(2,522)	(2,932)	(5,205)	(12,477)	(13,199)
Accretion of redeemable convertible preferred stock	(953)	(1,231)	(2,283)	—	—
Net loss attributable to common stockholders	\$(3,475)	\$(4,163)	\$(7,488)	\$(12,477)	\$(13,199)
Net loss per common share (basic and diluted)	\$ (4.33)	\$ (5.18)	\$ (2.96)	\$ (1.10)	\$ (1.16)
Weighted average shares used in computing basic and diluted net loss per common share	803	803	2,530	11,304	11,405
	Year Ended December 31,				
	1998	1999	2000	2001	2002
(in thousands)					
<b>BALANCE SHEET DATA:</b>					
Cash, cash equivalents and short-term investments	\$ 4,805	\$ 14,455	\$45,994	\$26,263	\$ 8,483
Working capital	4,985	14,982	46,056	26,591	12,544
Total assets	5,893	16,318	55,783	44,861	31,963
Total redeemable convertible preferred stock	15,014	29,293	—	—	—
Total stockholder’s equity (deficit)	(9,357)	(13,502)	54,143	43,055	29,913

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS:

We caution readers that statements in this Annual Report on Form 10-K that are not strictly historical statements, including, but not limited to: statements reflecting our expectations regarding the timing, cost, and success of our manufacturing scale-up at our new facility in Marlboro, Massachusetts and future manufacturing expansion and production, as well as related financing requirements; future financial performance; our technology and product development, cost and performance; our current and future strategic relationships and future market opportunities; and our other business and technology strategies and objectives, constitute forward-looking statements which are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements may be identified with such words as "we expect", "we believe", "we anticipate" or similar indications of future expectations. These statements are neither promises nor guarantees and involve risks and uncertainties, which could cause our actual results to differ materially from such forward-looking statements. Such risks and uncertainties may include, among other things, those risks and uncertainties described in this Annual Report and in our other filings with the Securities and Exchange Commission, copies of which may be accessed through the SEC's Web Site at <http://www.sec.gov>. We caution readers not to place undue reliance on any forward-looking statements contained in this Annual Report, which speak only as of the date of this Annual Report. We disclaim any obligation to publicly update or revise any such statements to reflect any change in our expectations, or events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in such forward-looking statements.

### OVERVIEW

We develop, manufacture and market solar power products for the global marketplace. Solar cells are semiconductor devices that convert sunlight into electricity and form the building block for all solar power products. To date, our product sales have been primarily solar panels, which have been used to generate electricity for on-grid and off-grid applications. Off-grid applications have included the electrification of rural homes, lighting for small, rural schools and power supplies for water pumping. More recently, an increasing percentage of our products have been used by on-grid customers as a clean, renewable source of alternative or supplemental electricity.

As more fully described in Part I of this report under the heading "Overview," on March 21, 2003, we entered into a definitive purchase agreement with certain investors to raise \$29,475,000 through the issuance of up to approximately 43,200,000 shares of series A convertible preferred stock and the sale of a warrant to purchase 2,400,000 shares of our common stock. Consummation of the transactions contemplated by the purchase agreement is subject to obtaining stockholder approval and other closing conditions.

*Product revenues.* Product revenues consist of revenues from the sale of solar cells, panels and systems. Product revenues represented 78.5% of total revenues for the year ended December 31, 2002, 62.4% of total revenues for the year ended December 31, 2001 and 19.3% of total revenues for the year ended December 31, 2000. International product sales accounted for approximately 68%, 35% and 93% of total product revenues for the periods ended December 31, 2002, 2001 and 2000, respectively. During 2002, product sales to a European distributor accounted for approximately 57% of product revenue. During 2001, sales to a U.S. distributor and a Japanese distributor accounted for approximately 52% and 22% of product revenue, respectively. During 2000, sales to a Japanese distributor accounted for approximately 90% of product revenue. We anticipate that international sales will continue to account for a significant portion of our product revenues for the foreseeable future. Currently, all product revenues are denominated in United States dollars. Foreign exchange rate fluctuations have impacted the relative competitiveness of our products in international markets, but we have not had any direct foreign exchange exposure.

*Research revenues.* Research revenues consist of revenues from various state and federal government agencies to fund our ongoing research, development, testing and enhancement of our products and manufacturing technology. We have not in the past, nor is it our intention in the future, to pursue contracts that are not part of our ongoing research activities. We recognize research revenues as services are rendered.

*Cost of product revenues.* Cost of product revenues consists primarily of salaries and related personnel costs, materials expenses, depreciation expenses, maintenance, rent, royalties on licensed technology, warranty costs and other support expenses associated with the manufacture of our solar power products. We expect to continue to experience costs in excess of product revenues unless we are able to achieve greater manufacturing efficiencies, higher yields and higher production levels.

*Research and development expenses, including cost of research revenues.* Research and development expenses, including cost of research revenues, consist primarily of salaries and related personnel costs, consulting expenses and prototype costs



related to the design, development, testing and enhancement of our products and manufacturing technology. We expense our research and development expenses as incurred. We believe that research and development is critical to our strategic objectives of enhancing our technology, reducing manufacturing costs and meeting the changing requirements of our customers. As a result, we expect that our total research and development expenses will increase in the future.

*Selling, general and administrative expenses.* Selling, general and administrative expenses consist primarily of salaries and related personnel costs, professional fees, rent, insurance and other sales expenses. We expect that selling expenses will increase substantially in absolute dollars as we increase our sales efforts, hire additional sales personnel and initiate additional marketing programs. We expect that general and administrative expenses will increase as we add personnel and incur additional costs related to the growth of our business.

*Stock-based compensation expense.* Prior to December 31, 2000, we recorded total cumulative deferred compensation of approximately \$1.3 million representing the difference between fair market value of the common stock and the exercise price on the option grant date. These amounts were presented as a reduction of stockholders' equity and are being amortized ratably over the vesting period of the options, which is generally four years. The amortization resulted in charges to operations of \$289,000, \$290,000, and \$294,000 for the years ended December 31, 2002, 2001, and 2000, respectively, and is reflected in operating expenses. We expect to recognize stock-based compensation expense for these past grants of approximately \$290,000 for the year ending December 31, 2003, and \$70,000 for the year ending December 31, 2004.

*Net interest income.* Net interest income consists primarily of interest earned on the holding of short-term, high quality commercial paper, corporate bonds and United States government-backed securities, less any bond premium amortization.

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The preparation of consolidated financial statements in accordance with generally accepted accounting principals requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

### **Revenue Recognition and Allowance for Doubtful Accounts**

We recognize product revenue if persuasive evidence of an arrangement exists, shipment has occurred, risk of loss has transferred to the customer, sales price is fixed or determinable, and collectibility is reasonably assured. The market for solar power products is emerging and rapidly evolving. We currently sell our solar power products primarily to distributors, system integrators and other value-added resellers within and outside of North America, which typically resell our products to end users throughout the world. For new customers requesting credit, we evaluate creditworthiness based on credit applications, feedback from provided references, and credit reports from independent agencies. For existing customers, we evaluate creditworthiness based on payment history and known changes in their financial condition.

We also evaluate the facts and circumstances related to each sales transaction and consider whether risk of loss has not passed to the customer upon shipment. We consider whether our customer is purchasing our product for stock, and whether contractual or implied rights to return the product exist or whether our customer has an end user contractually committed. To date, we have not offered rights to return our products other than for normal warranty conditions.

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, such that their ability to make payments was impaired, additional allowances could be required.

Revenue from research grants is recognized as services are rendered to the extent of allowable costs incurred.

### **Inventory**

Inventory is valued at the lower of cost or market. Certain factors may impact the realizable value of our inventory including, but not limited to, technological changes, market demand, changes in product mix strategy, new product introductions and significant changes to our cost structure. Given our current production levels and the market value of our products, we currently sell our inventory at prices that are below the sum of our fixed and variable costs per unit. Accordingly,

we write down our inventory to realizable value equal to the difference between the cost of inventory and the estimated market value. In addition, estimates of reserves are made for obsolescence based on the current product mix on hand and its expected net realizability. If actual market conditions are less favorable or other factors arise that are significantly different than those anticipated by management, additional inventory write-downs or increases in obsolescence reserves may be required. We treat lower of cost or market adjustments and inventory reserves as an adjustment to the cost basis of the underlying inventory. Accordingly, favorable changes in market conditions are not recorded to inventory in subsequent periods.

## **Warranty**

We provide for the estimated cost of product warranties at the time revenue is recognized. Given our limited operating history, we use historical industry solar panel failure rates as the basis for our warranty provision calculation. While we engage in product quality programs and processes, including monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates and material usage and service delivery costs incurred in correcting a product failure. If our actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required. Since we have a limited operating history and our manufacturing process differs from industry standards, our experience may be different from the industry data used as a basis for our estimate. While our methodology takes into account these uncertainties, adjustments in future periods may be required as our products mature.

## **Long-lived Assets**

Our policy regarding long-lived assets is to evaluate the recoverability or usefulness of these assets when the facts and circumstances suggest that these assets may be impaired. This analysis relies on a number of factors, including changes in strategic direction, business plans, regulatory developments, economic and budget projections, technological improvements, and operating results. The test of recoverability or usefulness is a comparison of the asset value to the undiscounted cash flow of its expected cumulative net operating cash flow over the asset's remaining useful life. Any write-downs would be treated as permanent reductions in the carrying amount of the asset and an operating loss would be recognized. To date, we have had recurring operating losses and the recoverability of our long-lived assets is contingent upon executing our business plan that includes further reducing our manufacturing costs and significantly increasing sales. If we are unable to execute our business plan, we may be required to write down the value of our long-lived assets in future periods.

## **COMPARISON OF YEARS ENDED DECEMBER 31, 2002 AND 2001**

*Revenues.* Our product revenues for the year ended December 31, 2002 were \$5.3 million, an increase of \$3.8 million, or 243%, from \$1.5 million for the same period in 2001. The increase in product revenues was due to the increased production capacity of our manufacturing facility in Marlboro, Massachusetts, and our increased marketing and sales activities. Research revenues for the year ended December 31, 2002 were \$1.4 million, an increase of \$516,000, or 55%, from \$932,000 for the same period in 2001. The increase in research revenues reflects revenue recognized on a newly awarded research contract with the National Renewable Energy Laboratory.

*Cost of product revenues.* Our cost of product revenues for the year ended December 31, 2002 was \$12.4 million, an increase of \$2.8 million, or 29%, from \$9.6 million for the same period in 2001. This increase was associated with increased production at our Marlboro facility. Approximately a third of the increase was due to higher depreciation expense resulting from equipment placed in service at our Marlboro manufacturing facility, approximately half of the increase was due to increases in materials purchased due to increased production, and most of the remainder was due to increases in salaries associated with additional personnel. We expect our cost of product revenues to decline as a percentage of product revenues in 2003, as we increase our product revenues, but to remain negative unless we achieve greater manufacturing efficiencies, higher yields and higher production levels.

*Research and development expenses, including cost of research revenues.* Our research and development expenses, including cost of research revenues, for the year ended December 31, 2002 were \$3.7 million, an increase of \$629,000, or 21%, from \$3.1 million for the same period in 2001. The increase was due primarily to the addition of employees and increased spending on both contract related and non-contract related research and development projects.

*Selling, general and administrative expenses.* Our selling, general and administrative expenses for the year ended December 31, 2002 were \$4.5 million, an increase of \$432,000, or 11%, from \$4.1 million in 2001. Approximately 20% of the increase was due to increases in insurance costs, approximately 33% of the increase was due to increases in salary and other costs associated with the establishment of our Germany sales office, and the remainder of the increase was due to higher depreciation and professional service fees.

*Stock-based compensation expense.* Our stock-based compensation expense, which is included in operating expenses, for the year ended December 31, 2002 was \$289,000, a decrease of \$1,000 from \$290,000 for the same period in 2001. The decrease in stock-based compensation expense for the year ended December 31, 2002 was due to employment terminations during 2002 of employees with non-vested balances of stock options granted before our initial public offering.

*Net interest income.* Our net interest income for the year ended December 31, 2002 was \$674,000, a decrease of \$1.2 million, or 63%, from \$1.8 million for the same period in 2001. The decrease in interest income was due to declining cash and investment balances resulting from capital equipment purchases and funding of operations.

## **COMPARISON OF YEARS ENDED DECEMBER 31, 2001 AND 2000**

*Revenues.* Our product revenues for the year ended December 31, 2001 were \$1.5 million, an increase of \$1.1 million, or 269%, from \$419,000 for the same period in 2000. Our increase in product revenues was due to increases in production volumes resulting from our move to our new Marlboro manufacturing facility, Massachusetts, which enabled us to increase commercial sales to key customers. Research revenues for the year ended December 31, 2001 were \$932,000, a decrease of \$821,000, or 47%, from \$1.8 million for the same period in 2000. The decline in research revenues reflects reduced expenditures on our research contracts, as two of three multi-year contracts were completed in the second quarter of 2001.

*Cost of product revenues.* Our cost of product revenues for the year ended December 31, 2001 was \$9.6 million, an increase of \$6.8 million, or 245%, from \$2.8 million for the same period in 2000. The increase in cost of product revenues was associated with the expansion of our pilot manufacturing operations, and the relocation, preparation and start-up of our manufacturing operations in our Marlboro facility. Approximately one-quarter of the increase was due to increases in materials expense, one-third was caused by increases in salary expense, and one-third was caused by increases in consulting fees, with the remainder mainly caused by increases in warranty, depreciation and royalty expense.

*Research and development expenses, including cost of research revenues.* Our research and development expenses, including cost of research revenues, for the year ended December 31, 2001 were \$3.1 million, a decrease of \$319,000, or 9%, from \$3.4 million for the same period in 2000. The decrease was due primarily to a decrease in consulting fees associated with designing and developing new processes and equipment for our manufacturing operations, and reduced expenditures on our research contracts, as two of three multi-year contracts were completed in the second quarter of 2001.

*Selling, general and administrative expenses.* Our selling, general and administrative expenses for the year ended December 31, 2001 were \$4.1 million, an increase of \$1.6 million, or 63%, from \$2.5 million in 2000. The increase is nearly evenly divided among increases in rent expense, salary expense and professional fees. The increase in salary expense represents both additional personnel and salary increases and bonuses. The increase in professional fees was principally due to increased legal and auditing fees associated with our increased requirements in these areas as a newly public company.

*Stock-based compensation expense.* Our stock-based compensation expense, which is included in operating expenses, for the year ended December 31, 2001 was \$290,000, a decrease of \$4,000, or 1%, from \$294,000 for the same period in 2000. The decrease in stock-based compensation expense for the year ended December 31, 2001 was due to employment terminations during 2001 of employees with non-vested balances of stock options granted before our initial public offering.

*Net interest income.* Our net interest income for the year ended December 31, 2001 was \$1.8 million, an increase of \$540,000, or 41%, from \$1.3 million for the same period in 2000. The increase in net interest income was due to higher average cash balances that resulted from the completion of our initial public offering in November 2000.

## **LIQUIDITY AND CAPITAL RESOURCES**

We have historically financed our operations and met our capital expenditures requirements primarily through sales of our capital stock and, to a lesser extent, research and product revenues. At December 31, 2002, we had working capital of \$12.5 million, including cash, cash equivalents and short-term investments of \$8.5 million.

Net cash used in operating activities was \$14.3 million for the year ended December 31, 2002, \$11.4 million for the year ended December 31, 2001, and \$4.2 million for the year ended December 31, 2000. The increase in net cash used in operating activities was primarily due to increases in our net loss and current assets associated with our inventory build up and an increase in receivables due to higher sales. As of December 31, 2002, Days Sales Outstanding (DSO) was approximately 111 days, versus approximately 51 days as of December 31, 2001. The increase in DSO is attributed to a shift in the mix of customers where 68% of product revenue in 2002 related to international customers versus 35% in 2001. International customers are commonly offered longer payment terms than domestic customers due to established business practices. In addition, a significant portion of sales in 2001 was with a significant customer that took advantage of early payment discounts



and this customer did not purchase significant quantities in 2002. DSO was also negatively impacted by the volume of sales activity near the end of 2002, which significantly increased as compared to the same period of 2001.

Net cash provided by investing activities was \$12.9 million for the year ended December 31, 2002, compared to net cash used in investing activities of \$16,000 for the year ended December 31, 2001, and \$27.1 million for the year ended December 31, 2000. Net cash was provided by maturing and selling short-term investments as required to fund operations and purchases of equipment since relocating to our Marlboro manufacturing facility. Net cash used in investing activities primarily represents capital expenditures, and also includes purchases, sales and maturities of high quality corporate paper, corporate bonds and United States government-backed obligations with contractual maturities typically less than one year.

Net cash provided by financing activities was \$10,000 for the year ended December 31, 2002, \$812,000 for the year ended December 31, 2001, and \$43.0 million for the year ended December 31, 2000. During 2002 and 2001, cash provided by financing activities represents proceeds from common stock shares issued under our Employee Stock Purchase Plan, and proceeds from the exercise of options and warrants to purchase common stock. For the year ended December 31, 2000, cash provided by financing activities represents proceeds of private placements of redeemable convertible preferred stock and the sale of common stock in our initial public offering.

Capital expenditures were \$2.9 million for the year ended December 31, 2002, \$9.4 million for the year ended December 31, 2001, and \$7.1 million for the year ended December 31, 2000. Capital expenditures for the year ended December 31, 2002 were primarily for equipment needed for our manufacturing facility. As of December 31, 2002, our outstanding commitments for capital expenditures were approximately \$500,000. Nearly all of our commitments for capital expenditures are associated with infrastructure improvements and equipment purchases for our manufacturing facility. The first of the Marlboro facility's two manufacturing lines became operational in 2001. During the first part of 2002, we began engineering and authorized capital expenditures for equipment for a second manufacturing line. We have also entered into agreements to purchase and have purchased some of the longer-lead time equipment for the second manufacturing line. We will fund our current capital commitments with the proceeds from our initial public offering, which closed in November 2000. In addition to the current capital commitments, substantial further capital expenditures will be required over the next twelve months to increase the total capacity at our manufacturing facility to our target level of 10 to 14 megawatts for both lines. However, our current cash, cash equivalents and short-term investments will not be sufficient to fund this capacity expansion or our operations through fiscal year 2003 and, as a result, we will need to raise significant additional financing in order to successfully build out our manufacturing capacity and fund our operations. As more fully described in Part I of this report under the heading "Financing Transaction," on March 21, 2003, we entered into a definitive purchase agreement with certain investors to raise \$29,475,000 through the issuance of up to a maximum of approximately 43,200,000 shares of series A convertible preferred stock and the sale of a warrant to purchase 2,400,000 shares of our common stock. Consummation of the transactions contemplated by the purchase agreement is subject to obtaining stockholder approval and other closing conditions. If we are able to complete this financing in a timely manner, we expect the second manufacturing line to become operational in late 2003 and in 2004. If we are not able to complete a financing in a timely manner, we will need to implement fundamental changes to our business and operations which will likely include substantially reducing, suspending, or terminating our capacity expansion and substantially reducing our daily operating expenditures from current levels, in which case we believe our cash, cash equivalents and short-term investments will then be sufficient to fund our operations through the end of fiscal year 2003.

In addition, we may need additional financing to execute our business plan sooner if we need to respond to business contingencies such as the need to enhance our operating infrastructure, respond to competitive pressures and acquire complementary businesses or necessary technologies. We do not know whether we will be able to raise additional financing on terms favorable to us. If adequate funds are not available or are not available on acceptable terms, our ability to fund our operations, develop and expand our manufacturing operations and distribution network, or otherwise respond to competitive pressures would be significantly limited.

We currently do not have any special purpose entities or off-balance sheet financing arrangements.

The following table summarizes our contractual obligations as of December 31, 2002 and the effect such obligations are expected to have on our liquidity and cash flow in future periods:

	<b>Total Years</b>	<b>Less than 1 Year</b>	<b>1-3 Years</b>	<b>4-5 Years</b>	<b>After 5 Years</b>
Non-cancelable operating lease	\$3,705,469	\$ 488,672	\$1,501,172	\$1,047,656	\$667,969
Minimum future royalty payments	50,000	25,000	25,000		
Capital expenditure obligations	500,000	500,000			
Raw materials purchase commitments	1,750,000	1,750,000			
<b>Total contractual cash obligations</b>	<b>\$6,005,469</b>	<b>\$2,763,672</b>	<b>\$1,526,172</b>	<b>\$1,047,656</b>	<b>\$667,969</b>

## **INCOME TAXES**

As of December 31, 2002, we had federal and state net operating loss carryforwards totaling approximately \$35.1 million and \$29.6 million, respectively, available to reduce future taxable income and tax liabilities which expire at various dates between 2003 and 2023. In addition, as of December 31, 2002 we had federal and state research and development tax credit carryforwards of approximately \$735,000 and \$456,000, respectively, available to reduce future taxable income and tax liabilities which expire at various dates between 2009 and 2023. Under provisions of the Internal Revenue Code, substantial changes in our ownership may limit the amount of net operating loss carryforwards and research and development credit carryforwards, which can be used in future years. We have evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets. We have considered our history of losses and, in accordance with the applicable accounting standards, have fully reserved the deferred tax asset.

## **RECENT ACCOUNTING PRONOUNCEMENTS**

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." This Statement addresses financial accounting and reporting for costs associated with exit or disposal activities and replaces Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." This Statement is effective for exit or disposal activities initiated after December 31, 2002, with early application encouraged. Management does not believe SFAS No. 146 will have a material impact on our financial position and results of operations.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure", which amends SFAS No. 123, "Accounting for Stock-Based Compensation." SFAS No. 148 provides specific guidance for companies choosing to transition from employee stock option accounting under the provisions of APB No. 25 to employee stock option accounting under SFAS No. 123. We currently account for employee stock option grants under APB No. 25 and will continue to do so during fiscal 2003. In addition, the provisions of SFAS No. 148 require that, in all annual and interim financial statements, companies disclose for each period for which an income statement is presented an accounting policy footnote that includes the method of accounting for stock options, total stock compensation cost (which is recognized in the income statement and would have been recognized had SFAS No. 123 been adopted for recognition purposes as of its effective date), and pro forma net income and earnings per share (where applicable) that would have been reported had SFAS No. 123 been adopted for recognition purposes as of its effective date. We currently provide SFAS No. 123 disclosures in the footnotes to our annual financial statements and, commencing in 2003, we will be required to disclose this information in our interim financial statements as well.

In November 2002, the FASB issued FIN No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" an interpretation of SFAS No. 5, 57, and 107 and rescission of FASB Interpretation No. 34." The Interpretation requires that a guarantor recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken by issuing the guarantee. The Interpretation also requires additional disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees it has issued. The accounting requirements for the initial recognition of guarantees are applicable on a prospective basis for guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for all guarantees outstanding, regardless of when they were issued or modified. Accounting policies and disclosures regarding our product warranty liability and other indemnification agreements that are required under FIN No. 45 are reflected in our notes to the consolidated financial statements.

## **CERTAIN FACTORS WHICH MAY AFFECT FUTURE RESULTS**

### **RISKS RELATING TO OUR FINANCIAL RESULTS**

#### **Evaluating our business and future prospects may be difficult due to our limited operating history.**

We are at an early stage of development and there is limited historical information available upon which you can base your evaluation of our business and prospects. We were formed in 1994 to research and develop crystalline silicon technology for use in manufacturing solar power products. Although we began shipping product from our pilot manufacturing facility in 1997, the primary objective of our pilot production line was the technical development and further refinement of our String Ribbon technology and related manufacturing processes. We shipped our first commercial products from our Marlboro manufacturing facility in June 2001. We have shipped only a limited number of solar power panels, almost 30,000, as of December 31, 2002 and have recognized limited revenues since our inception.

In addition, our earlier stage of development means that we have less insight into how market and technology trends may affect our business. The revenue and income potential of our business is unproven and the market we are addressing is rapidly evolving. You should consider our business and prospects in light of the risks, expenses and challenges that we will face as an early-stage company seeking to develop and manufacture new products in a growing and rapidly evolving market.

**We have a history of losses, expect to incur substantial further losses and may not achieve or maintain profitability in the future, which may decrease the market value of our stock.**

Since our inception, we have incurred significant net losses, including net losses of \$13.2 million for the year ended December 31, 2002. As a result of ongoing operating losses, we had a cumulative net loss of \$41.4 million as of December 31, 2002. We expect to incur substantial losses for the foreseeable future, and may never become profitable. Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future, which could materially decrease the market value of our common stock. We expect to continue to incur significant capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we seek to:

- expand our manufacturing operations;
- develop our distribution network;
- continue to research and develop our products and manufacturing technologies;
- implement internal systems and infrastructure in conjunction with our growth; and
- hire additional personnel.

We do not know whether our revenues will grow at all or grow rapidly enough to absorb these expenses, and our limited operating history makes it difficult to assess the extent of these expenses or their impact on our operating results.

**Our stock price could fall substantially if our quarterly revenue or operating results fluctuate or are disappointing.**

Our quarterly revenue and operating results have fluctuated significantly in the past and may fluctuate significantly from quarter to quarter in the future due to a variety of factors, many of which are discussed elsewhere in this section.

We anticipate that our operating expenses will continue to increase significantly. If sales in any quarter do not increase correspondingly, our net losses for that period will increase. For these reasons, quarter-to-quarter comparisons of our results of operations are not necessarily meaningful and you should not rely on results of operations in any particular quarter as an indication of future performance. If our quarterly revenue or results of operations fall below the expectations of investors or public market analysts in any quarter, the market value of our common stock would likely decrease, and could decrease rapidly and substantially.

## **RISKS RELATING TO OUR INDUSTRY, PRODUCTS AND OPERATIONS**

**If solar power technology is not suitable for widespread adoption or sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our sales would not significantly increase and we would be unable to achieve or sustain profitability.**

The market for solar power products is emerging and rapidly evolving, and its future success is uncertain. If solar power technology proves unsuitable for widespread commercial deployment or if demand for solar power products fails to develop sufficiently, we would be unable to generate enough revenues to achieve and sustain profitability. In addition, demand for solar power products in the markets and geographic regions we target may not develop or may develop more slowly than we anticipate. Many factors will influence the widespread adoption of solar power technology and demand for solar power products, including:

- cost-effectiveness of solar power technologies as compared with conventional and non-solar alternative energy technologies;
- performance and reliability of solar power products as compared with conventional and non-solar alternative energy products;
- success of alternative distributed generation technologies such as fuel cells, wind power and microturbines;

- fluctuations in economic and market conditions which impact the viability of conventional and non-solar alternative energy sources, such as increases or decreases in the prices of oil and other fossil fuels;
- continued deregulation of the electric power industry and broader energy industry; and
- availability of government subsidies and incentives.

**Problems with product quality or product performance may cause us to incur warranty expenses and may damage our market reputation and prevent us from achieving increased sales and market share.**

As is consistent with standard practice in our industry, the duration of our product warranties is lengthy relative to expected product life and has recently been increasing. Our current standard product warranty includes a one or two-year warranty period for defects in material and workmanship and a 25-year warranty period for declines in power performance. We believe our warranty periods are consistent with industry practice. Due to the long warranty period, we bear the risk of extensive warranty claims long after we have shipped product and recognized revenues. Although we have sold almost 30,000 solar panels since 1997, none of these panels has been operating more than six years, and over 50% of them have been operating less than one year. The possibility of future product failures could cause us to incur substantial expense to repair or replace defective product. Furthermore, widespread product failures may damage our market reputation and reduce our market share and cause sales to decline.

**We may fail to successfully bring to market our new solar power products under development, which may prevent us from achieving increased sales and market share.**

Although we have been selling our solar power products since 1997, we expect to derive a substantial portion of our revenues from sales of our new solar power products which are under development and not yet commercially available. Many of these new products are derived from our innovative cell fabrication and advanced panel design technologies, which are under development. If we fail to successfully develop our new solar power products or technologies, we will likely be unable to recover the losses we will have incurred to develop these products and technologies and may be unable to increase our sales and market share and to become profitable. Many of our new product and manufacturing technologies are novel and represent a departure from conventional solar power technologies, and it is difficult to predict whether we will be successful in completing their development. Our manufacturing technologies have been tested only in our pilot manufacturing facility and, in most cases, only limited pre-production prototypes of our new products have been field-tested.

**Our solar power products may not gain market acceptance, which would prevent us from achieving increased sales and market share.**

The development of a successful market for our solar power products may be adversely affected by a number of factors, many of which are beyond our control, including:

- our failure to produce solar power products which compete favorably against other solar power products on the basis of cost, quality and performance;
- our failure to produce solar power products which compete favorably against conventional energy sources and alternative distributed generation technologies, such as fuel cells, on the basis of cost, quality and performance;
- whether customers accept our new panel designs under development and the techniques we are developing to mount them; and
- our failure to develop and maintain successful relationships with distributors, systems integrators and other resellers, as well as strategic partners.

If our solar power products fail to gain market acceptance, we would be unable to increase our sales and market share and to achieve and sustain profitability.

**Technological changes in the solar power industry could render our solar power products obsolete, which could reduce our market share and cause our sales to decline.**

Our failure to further refine our technology and develop and introduce new solar power products could cause our products to become obsolete, which could reduce our market share and cause our sales to decline. The solar power industry is rapidly



evolving and competitive. We will need to invest significant financial resources in research and development to keep pace with technological advances in the solar power industry and to effectively compete in the future. We believe that there are a variety of competing solar power technologies under development by other companies that could result in lower manufacturing costs than those expected for our solar power products. Our development efforts may be rendered obsolete by the technological advances of others, and other technologies may prove more advantageous for the commercialization of solar power products.

**The build-out of our manufacturing facility may take longer and cost more than we expect, which would likely result in lower revenues and earnings than anticipated.**

If we fail to successfully complete the build-out of our Marlboro manufacturing facility, our business and results of operations would likely be materially impaired. The first of the Marlboro facility's two manufacturing lines entered service in 2001. We recently began engineering and authorized capital expenditures for longer lead-time equipment for the second manufacturing line, which we expect to become operational in late 2003 and in 2004 if we are able to raise the funds necessary to finance its construction. Completing the build-out of this facility to capacity will require a significant investment of capital and substantial engineering expenditures, and is subject to significant risks, including risks of cost overruns, lack of available financing, delays, equipment problems and other start-up and operating difficulties. Our manufacturing processes also use custom-built equipment that may not be delivered and installed in our new facility in a timely manner. In addition this equipment may take longer and cost more to debug than planned and may never operate as designed. We plan to incorporate first-time equipment designs and technology improvements, which we expect to lower unit capital and operating costs, but this new technology may not be successful, which would increase cost, limit capacity, and prevent us from achieving increases in sales. If we experience any of these or similar difficulties, we may be unable to complete the build-out of the facility, our manufacturing capacity could be substantially constrained and our revenues and earnings would likely be materially impaired.

**We may not be able to manufacture our solar power products in sufficient quantities or at acceptable costs to meet customer demand.**

To date, we have focused primarily on research and development of our solar power products and have limited experience manufacturing large volumes of our solar power products on a commercial basis. Furthermore, we may not be able to achieve our manufacturing cost targets, which could prevent us from ever becoming profitable. If we cannot achieve our targeted production volumes or capacity or if we experience capacity constraints, quality control problems or other disruptions, we may not be able to manufacture our products in large volumes or at acceptable costs and may be unable to satisfy the demand of our customers, which would reduce our market share and revenues and may harm our reputation. The expansion of our manufacturing operations to achieve targeted production volumes will require the successful deployment of advanced equipment and technology utilizing manufacturing processes and components, which we are currently developing.

**Our ability to increase market share and sales depends on our ability to successfully maintain our existing distribution relationships and expand our distribution channels.**

We currently sell our solar power products primarily to distributors, system integrators and other value-added resellers within and outside of North America, which typically resell our products to end users on a global basis. Through December 31, 2002, we sold our solar power products to approximately 20 distributors, system integrators and other value-added resellers. If we are unable to successfully maintain our existing distribution relationships and expand our distribution channels, our revenues and future prospects will be materially harmed. As we seek to grow our sales by entering new markets in which we have little experience selling our solar power products, our ability to increase market share and sales will depend substantially on our ability to expand our distribution channels by identifying, developing and maintaining relationships with resellers both within and outside of North America. We may be unable to enter into relationships with resellers in the markets we target or on terms and conditions favorable to us, which could prevent us from entering these markets or entering these markets in accordance with our plans. Our ability to enter into and maintain relationships with resellers will be influenced by the relationships between these resellers and our competitors, market acceptance of our solar power products and our low brand recognition as a new entrant.

**We face risks associated with the marketing, distribution and sale of our solar power products internationally, and if we are unable to effectively manage these risks, it could impair our ability to expand our business abroad.**

From our inception through December 31, 2002, approximately 60% of our product sales have been made to resellers outside North America. We expect that our sales both to resellers and distributors outside of North America and through our resellers and distributors to end users outside of North America will continue to be significant in the future. We will require significant management attention and financial resources to successfully develop our international sales channels. In addition, the marketing, distribution and sale of our solar power products internationally exposes us to a number of risks with which we

have limited experience. If we are unable to effectively manage these risks, it could impair our ability to grow our business abroad. These risks include:

- difficult and expensive compliance with the commercial and legal requirements of international markets, with which we have only limited experience;
- inability to obtain intellectual property protection;
- encountering trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could affect the competitive pricing of our solar power products and reduce our market share in some countries; and
- difficulty of enforcing revenue collection internationally.

We expect that our international sales will be generally denominated in United States dollars. As a result, increases in the value of the United States dollar relative to foreign currencies would cause our products to become less competitive in international markets and could result in limited, if any, sales and profitability. To the extent that we denominate sales in foreign currencies, we will be exposed to increased risks of currency fluctuations.

Our strategy includes establishing local manufacturing facilities in international markets, although we have not yet done so. As we implement our strategy, we may encounter legal and commercial restrictions and incur taxes and other expenses to establish our manufacturing facilities in certain countries. In addition, we may potentially forfeit, voluntarily or involuntarily, foreign assets due to economic or political instability in the countries where our local manufacturing facilities are located.

**Our dependence on a small number of resellers may cause significant fluctuations or declines in our product revenues.**

From our inception through December 31, 2002, our three largest resellers accounted for approximately 67% of our product sales and our 10 largest resellers accounted for approximately 90% of our product sales. We anticipate that sales of our solar power products to a limited number of key resellers will continue to account for a significant portion of our total product revenues for the foreseeable future. Consequently, any one of the following events may cause significant fluctuations or declines in our product revenues:

- reduction, delay or cancellation of orders from one or more of our significant resellers;
- selection by one or more of our significant resellers of products competitive with ours;
- loss of one or more of our significant resellers and our failure to recruit additional or replacement resellers; and
- failure of any of our significant resellers to make timely payment of our invoices.

**Our dependence on a limited number of third party suppliers for raw materials, key components for our solar power products and custom-built equipment for our operations could prevent us from delivering our products to our customers within required timeframes and we may experience order cancellation and loss of market share.**

We manufacture all of our solar power products using materials and components procured from a limited number of third-party suppliers. If we fail to develop or maintain our relationships with these or our other suppliers, we may be unable to manufacture our products or our products may be available only at a higher cost or after a long delay, which could prevent us from delivering our products to our customers within required time frames and we may experience order cancellation and loss of market share. We currently do not have contracts with many of our suppliers and may not be able to procure sufficient quantities of the materials and components necessary to manufacture our products on acceptable commercial terms or at all. To the extent the processes that our suppliers use to manufacture materials and components are proprietary, we may be unable to obtain comparable materials and components from alternative suppliers. The failure of a supplier to supply materials and components in a timely manner, or to supply materials and components that meet our quality, quantity and cost requirements could impair our ability to manufacture our products and/or increase their costs, particularly if we are unable to obtain substitute sources of these materials and components on a timely basis or on terms acceptable to us. In addition, our manufacturing processes utilize custom-built equipment that is currently produced by a limited number of suppliers. A supplier's failure to supply this equipment in a timely manner, with adequate quality and on terms acceptable to us could delay our capacity expansion to our manufacturing facility and otherwise, disrupt our production schedule or increase our costs of production.

**Our use of forecasts to manage our inventory could result in insufficient quantities to meet reseller demand or excess inventory.**

We generally do not obtain long-term contracts or purchase orders prior to the production of our solar power products. Instead, we rely on forecasts to determine the timing of our production schedules and the volume of product to be manufactured. The level and timing of orders placed by our resellers may vary for many reasons. As a result, at any particular time, we may not have enough inventory to meet demand or we may have excess inventory, each of which could negatively impact our operating results. In addition, as we manufacture more solar power products without related purchase orders, we increase our risk of loss of revenues due to the obsolescence of products held in inventory for which we have already incurred production costs.

**The success of our business depends on the continuing contributions of our key personnel and our ability to attract and retain new qualified employees in a competitive labor market.**

We have attracted a highly skilled management team and specialized workforce, including scientists, engineers, researchers, and manufacturing and marketing professionals. If we were to lose the services of Mark A. Farber, our Chief Executive Officer, President and a director, or any of our other executive officers and key employees, our business could be materially and adversely impacted. We had 132 employees as of December 31, 2002, and anticipate that we will need to hire a significant number of new highly-skilled technical, manufacturing, sales and marketing, and administrative personnel if we are to successfully develop and market our products, develop our distribution network, and operate our expanded manufacturing facility. Competition for personnel is intense, and qualified technical personnel are likely to remain a limited resource for the foreseeable future. Locating candidates with the appropriate qualifications, particularly in the desired geographic location, can be costly and difficult. We may not be able to hire the necessary personnel to implement our business strategy, or we may need to provide higher compensation or training to our personnel than we currently anticipate. Moreover, any officer or employee can terminate his or her relationship with us at any time.

**Our management team may not be able to successfully implement our business strategies because it has limited experience managing a rapidly growing company.**

The existing members of our management team have had only limited experience managing a rapidly growing company on either a public or private basis. In connection with the planned expansion of our manufacturing capacity, we have undergone and anticipate undergoing further rapid growth in the scope of our operations and the number of our employees, which is likely to place a significant strain on our senior management team and other resources. In addition, we may encounter difficulties in effectively managing the budgeting, forecasting and other process control issues presented by this rapid growth. We may seek to augment or replace members of our management team or we may lose key members of our management team, and we may not be able to attract new management talent with sufficient skill and experience. If our management team is unable to manage the rapid growth of our business operations, then our product development, the expansion of our manufacturing operations and distribution network, and our sales and marketing activities would be materially and adversely affected.

**We require additional financing to fund our planned manufacturing capacity expansion and may not be able to raise additional financing or financing on favorable terms.**

We believe that our current cash, cash equivalents and short-term investments will not be sufficient to fund our planned manufacturing capacity expansion and operating expenditures over the next twelve months. As a result, we will need to raise significant additional financing if we are to successfully build out our manufacturing capacity and continue operating expenditures at current levels. As more fully described in Part I of this report under the heading "Financing Transaction," on March 21, 2003, we entered into a definitive purchase agreement with certain investors to raise \$29,475,000 through the issuance of up to approximately 43,200,000 shares of series A convertible preferred stock and the sale of a warrant to purchase 2,400,000 shares of our common stock. Consummation of the transactions contemplated by the purchase agreement is subject to our obtaining stockholder approval and other closing conditions. If we are able to raise this financing on time, we expect the second manufacturing line to become operational during late 2003 and in 2004. If we are not able to complete a financing in a timely manner, we will need to implement fundamental changes to our business and operations which will likely include substantially reducing, suspending, or terminating our capacity expansion and substantially reducing our daily operating expenditures from current levels, in which case we believe our cash, cash equivalents and short-term investments will then be sufficient to fund our operations through the end of fiscal year 2003. In addition, we may need additional financing to execute our business plan sooner if we need to respond to business contingencies such as the need to enhance our operating infrastructure, respond to competitive pressures and acquire complementary businesses or necessary technologies. We do not know whether we will be able to raise additional financing or financing on terms favorable to us. If adequate funds are not available or are not available on acceptable terms, our ability to fund our operations, develop and expand our manufacturing operations and distribution network, or otherwise respond to competitive pressures would be

significantly limited. In addition, if we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our existing stockholders will be reduced. These newly issued securities may have rights, preferences and privileges senior to those of existing stockholders.

**We face intense competition from other companies producing solar power and other energy generation products. If we fail to compete effectively, we may be unable to increase our market share and sales.**

The solar power market is intensely competitive and rapidly evolving. Our competitors have established a market position more prominent than ours, and if we fail to attract and retain customers and establish a successful distribution network for our solar power products, we may be unable to increase our sales and market share. There are over 20 companies in the world that produce solar power products, including BP Solar, Kyocera Corporation, Royal Dutch Shell, Sharp Corporation, and AstroPower, Inc. All of these solar power product producers, as well as several others, have historically derived all or a majority of their sales from conventional manufacturing technology that involves using wafers made from slicing solid blocks of crystalline silicon. In addition, some of these companies are developing advanced crystalline silicon or thin film technologies, including technologies such as advanced crystalline sheet and ribbon technologies and thin films of amorphous silicon, cadmium telluride and copper indium diselenide, and project future cost savings similar to or greater than ours. Other existing and potential competitors in the solar power market include universities and research institutions. We also expect that future competition will include new entrants to the solar power market offering new technological solutions. Further, many of our competitors are developing and are currently producing products based on new solar power technologies, including other crystalline silicon ribbon and sheet technologies, that they believe will ultimately have costs similar to, or lower than, our projected costs.

Most of our competitors are substantially larger than we are, have longer operating histories and have substantially greater financial, technical, manufacturing and other resources than we do. Many also have greater name recognition, a more established distribution network and a larger installed base of customers. In addition, many of our competitors have well-established relationships with our current and potential customers and have extensive knowledge of our target markets. As a result, our competitors may be able to devote greater resources to the research, development, promotion and sale of their products and respond more quickly to evolving industry standards and changing customer requirements than we can.

**If we are unable to protect our intellectual property adequately, we could lose our competitive advantage in the solar power market.**

Our ability to compete effectively against competing solar power technologies will depend, in part, on our ability to protect our current and future proprietary technology, product designs and manufacturing processes through a combination of patent, copyright, trademark, trade secret and unfair competition laws. We may not be able to adequately protect our intellectual property and may need to defend our intellectual property against infringement claims, either of which could result in the loss of our competitive advantage in the solar power market and materially harm our business and profitability. We face the following risks in protecting our intellectual property:

- we cannot be certain that our pending United States and foreign patent applications will result in issued patents or that the claims allowed are or will be sufficiently broad to protect our technology or processes;
- our license, but not our right, to practice the String Ribbon technology terminates upon expiration of the underlying patents which begin to expire in 2003 and our historical operating experience with String Ribbon and our related patented and proprietary manufacturing processes may not adequately protect our competitive advantage after these patents have expired;
- third parties may design around our patented technologies or seek to challenge or invalidate our patented technologies;
- we may incur significant costs and diversion of management resources in prosecuting or defending patent infringement suits;
- we may not be successful in prosecuting or defending patent infringement suits and, as a result, may need to seek to obtain a license of the third party's intellectual property rights; however, a license may not be available to us or may not be available to us on commercially reasonable terms; and
- the contractual provisions we rely on to protect our trade secrets and proprietary information, such as our confidentiality and non-disclosure agreements with our employees, consultants and other third parties, may be breached and our trade secrets and proprietary information disclosed to the public.

**Existing regulations and changes resulting from electric utility deregulation may present technical, regulatory and economic barriers to the purchase and use of solar power products, which may significantly reduce demand for our products.**

The market for electricity generation products is heavily influenced by federal, state and local government regulations and policies concerning the electric utility industry, as well as internal policies and regulations 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 are being modified and may continue to be modified. Customer purchases of, or further investment in the research and development of, alternative energy sources, including solar power technology, could be deterred by these regulations and policies, which could result in a significant reduction in the potential demand for our solar power products.

We anticipate that our solar power products 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. Any new government regulations or utility policies pertaining to our solar power products 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 power products.

**The reduction or elimination of government subsidies and economic incentives for on-grid applications could cause our sales to decline.**

We believe that the growth of some of our target markets, including the market for on-grid applications, depends in part on the availability and size of government subsidies and economic incentives. Accordingly, the reduction or elimination of government subsidies and economic incentives may adversely affect the growth of these markets, which could cause our sales to decline. Today, the cost of solar power substantially exceeds the cost of power furnished by the electric utility grid. As a result, federal, state and local governmental bodies in many countries, most notably the United States, Japan and Germany, have provided subsidies in the form of cost reductions, tax write-offs and other incentives to end users, distributors, systems integrators and manufacturers of solar power products to promote the use of solar energy in on-grid applications and to reduce dependency on other forms of energy. These government subsidies and economic incentives could be reduced or eliminated altogether.

**The lack or inaccessibility of financing for off-grid solar power applications could cause our sales to decline.**

One of our key markets is off-grid solar power applications to developed and developing countries. In some developing countries, government agencies and the private sector have, from time to time, provided subsidies or financing on preferred terms for rural electrification programs. We believe that the availability of financing could have a significant effect on the level of sales of off-grid solar power applications, particularly in developing countries where users may not have sufficient resources or credit to otherwise acquire solar power systems. If existing financing programs for off-grid solar power applications are eliminated or if financing is inaccessible, the growth of the market for off-grid applications may be adversely affected, which could cause our sales to decline.

**Our reliance on government contracts to partially fund our research and development programs could impair our ability to commercialize our solar power technologies and would increase our research and development expenses.**

We intend to continue our policy of selectively pursuing contract research, product development, and market development programs funded by various agencies of the United States, state and international governments to complement and enhance our own resources. The percentage of our total revenues derived from government-related contracts was approximately 21% for the year ended December 31, 2002. We currently have two active research contracts with total estimated revenues of approximately \$5.0 million, \$2.75 million of which has been authorized by the sponsoring agencies and \$2.1 million of which has been recorded as revenue as of December 31, 2002. The remaining \$2.9 million of revenue will be recognized over the remaining life of each of the contracts, which expire on October 31, 2003 and May 31, 2005. These government agencies may not continue their commitment to programs to which our development projects are applicable. Moreover, we may not be able to compete successfully to obtain funding through these or other programs. A reduction or discontinuance of these programs or of our participation in these programs would increase our research and development expenses, which could impair our ability to develop our solar power technologies.

In addition, contracts involving government agencies may be terminated at the convenience of the agency. Other risks include potential disclosure of our confidential information to third parties and the exercise of “march-in” rights by the government. Our government-sponsored research contracts require that we provide regular written technical updates on a monthly, quarterly or annual basis, and, at the conclusion of the research contract, a final report on the results of our technical

research. Because these reports are generally available to the public, third parties may obtain some aspects of our sensitive confidential information. March-in rights refer to the right of the United States government or government agency to require us to grant a license to the technology to a responsible applicant or, if we refuse, the government may grant the license itself. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give the United States industry preference. Funding from government contracts also may limit when and how we can deploy our technology developed under those contracts.

**Compliance with environmental regulations can be expensive and inadvertent noncompliance may result in adverse publicity and potentially significant monetary damages and fines.**

We are required to comply with all federal, state and local regulations regarding protection of the environment. If more stringent regulations are adopted in the future, the costs of compliance with these new regulations could be substantial. We believe that we have all necessary permits to conduct our business as it is presently conducted. If we fail to comply with present or future environmental regulations, however, we may be required to pay substantial fines, suspend production or cease operations. We use, generate and discharge toxic, volatile and otherwise hazardous chemicals and wastes in our research and development and manufacturing activities. Any failure by us to control the use of, or to restrict adequately the discharge of, hazardous substances could subject us to potentially significant monetary damages and fines. In addition, under some federal and state statutes and regulations, a governmental agency may seek recovery and response costs from operators of property where releases of hazardous substances have occurred or are ongoing, even if the operator was not responsible for such release or otherwise at fault.

**Product liability claims against us could result in adverse publicity and potentially significant monetary damages.**

Like other retailers, distributors and manufacturers of products that are used by consumers, we face an inherent risk of exposure to product liability claims in the event that the use of the solar power products we sell results in injury. Since our products are electricity producing devices, it is possible that consumers could be injured or killed by our products, whether by product malfunctions, defects, improper installation or other causes. In addition, since sales of our existing products have been modest and the products we are developing incorporate new technologies and use new installation methods, we cannot predict whether product liability claims will be brought against us in the future or the effect of any resulting adverse publicity on our business. Moreover, we may not have adequate resources in the event of a successful claim against us. We have evaluated the potential risks we face and believe that we have appropriate levels of insurance for product liability claims. We rely on our general liability insurance to cover product liability claims and have not obtained separate product liability insurance. If our insurance protection is inadequate, the successful assertion of product liability claims against us could result in potentially significant monetary damages.

**RISKS ASSOCIATED WITH THE MARKET FOR OUR COMMON STOCK**

**Our officers and directors control 18% of our common stock and may be able to significantly influence corporate actions.**

As of March 1, 2003, our executive officers, directors and entities affiliated with them controlled approximately 18% of our common stock. As a result, these stockholders, acting together, may be able to significantly influence all matters requiring approval by our stockholders, including the election of directors, the approval of charter and by-law amendments, and the approval of mergers or other business combinations. If we complete the financing transaction as described in this report, our executive officers, directors and entities affiliated with them would control approximately 56% of our common stock on an as converted basis.

**The price of our common stock may be volatile.**

The stock market has, from time to time, experienced extreme price and trading volume fluctuations, and the market prices of technology companies such as ours have been extremely volatile. Our operating performance will significantly affect the market price of our common stock. The proposed financing may add to the volatility of our common stock. To the extent we are unable to compete effectively and gain market share or the other factors described in this section affect us, our stock price will likely decline. The market price of our common stock also may be adversely impacted by broad market and industry fluctuations regardless of our operating performance, including general economic and technology trends. In addition, companies that have experienced volatility in the market price of their stock have been the subject of securities class action litigation. We may be involved in securities class action litigation in the future. This litigation often results in substantial costs and a diversion of management's attention and resources.

**The large number of shares eligible for public sale could cause our stock price to decline.**

The market price of our common stock could decline as a result of sales by our existing stockholders of a large number of shares of our common stock in the market or the perception that these sales could occur. These sales also might make it more difficult for us to sell equity securities in the future at a time and price that we deem appropriate.

**We are subject to anti-takeover provisions in our charter and by-laws and under Delaware law that could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders.**

Provisions of our certificate of incorporation, our by-laws and Delaware law could make it more difficult and expensive for a third party to pursue a tender offer, change in control transaction or takeover attempt, which is opposed by our board of directors. Stockholders who wish to participate in these transactions may not have the opportunity to do so. We also have a staggered board of directors, which makes it difficult for stockholders to change the composition of our board of directors in any one-year. If a tender offer, change in control transaction, takeover attempt or change in our board of directors is prevented or delayed, the market price of our common stock could decline.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK:**

### **INTEREST RATE RISK**

We do not use derivative financial instruments. We generally place our marketable security investments in high credit quality instruments. We do not expect any material loss from our marketable security investments and therefore believe that our potential interest rate exposure is not material.

### **FOREIGN CURRENCY EXCHANGE RATE RISK**

All of our sales are denominated in United States dollars. Accordingly, we have not been directly exposed to fluctuations in currency exchange rates. However, since we sell a significant percentage of our products internationally, the relative competitiveness of our products is impacted by foreign currency exchange rates. As we expand our manufacturing operations and distribution network internationally, our exposure to fluctuations in currency exchange rates may increase.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA:**

The Company's Financial Statements and related Notes and Report of Independent Accountants are included beginning on page F-1 of this Annual Report on Form 10-K.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE:**

Not applicable.

## **PART III**

## **ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT:**

The information required under this item may be found under the sections captioned "Election of Directors", "Occupations of Directors and Executive Officers", and "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement (the "2002 Proxy Statement"), which will be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2002, and is incorporated herein by reference.

## **ITEM 11. EXECUTIVE COMPENSATION:**

The information required under this item may be found under the section captioned "Compensation and Other Information Concerning Directors and Officers" in the 2002 Proxy Statement, and is incorporated herein by reference.

## **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT:**

The information required under this item may be found under the section captioned "Securities Ownership of Certain Beneficial Owners and Management" in the 2002 Proxy Statement, and is incorporated herein by reference.

## **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS:**

The information required under this item may be found under the caption "Certain Relationships and Related Transactions" in the 2002 Proxy Statement, and is incorporated herein by reference.

## **ITEM 14. CONTROLS AND PROCEDURES:**

- (a) Evaluation of disclosure controls and procedures.

The principal executive officer and principal financial officer have evaluated the disclosure controls and procedures as of a date within 90 days before the filing date of this annual report. Based on this evaluation they conclude that the Company's disclosure controls and procedures effectively ensure that information required to be disclosed in our filings and submissions under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.



(b) Changes in internal controls.

There have been no significant changes in our internal controls or in other factors that could significantly affect those controls subsequent to their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

#### **ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K:**

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

1. Consolidated Financial Statements. The financial statements included in Item 8 of Part II which appear beginning on page 30 of this Annual Report on Form 10-K.

2. Financial Statement Schedules. Schedule II - Valuation and Qualifying Accounts appears on page 47 of this Annual Report on Form 10-K.

3. Exhibits. The following exhibits:

<b>Exhibit Number</b>	<b>Description</b>
3.1 (1)	Third Amended and Restated Certificate of Incorporation of the Registrant. (Exhibit 3.2)
3.2 (1)	Second Amended and Restated By-laws of the Registrant. (Exhibit 3.4)
10.1 (1)*	1994 Stock Option Plan. (Exhibit 10.1)
10.2 (1)*	2000 Stock Option and Incentive Plan. (Exhibit 10.2)
10.3 (1)*	2000 Employee Stock Purchase Plan. (Exhibit 10.3)
10.4 (1)	Lease between Registrant and 211 Second Avenue Realty L.P. dated as of September 15, 1995, as amended. (Exhibit 10.4)
10.5 (1)	Lease Agreement between Registrant W9/TIB Real Estate Limited Partnership dated as of January 31, 2000, as amended (Exhibit 10.5)
10.6 (1)+	Distribution and Marketing Agreement between Registrant and Kawasaki Heavy Industries, Ltd. dated as of December 24, 1999. (Exhibit 10.6)
10.7 (1)+	Agreement between Registrant and Emanuel M. Sachs dated as of September 30, 1994, as amended. (Exhibit 10.7)
10.8 (1)	Series D Preferred Stock Purchase Agreement dated as of December 28, 1999. (Exhibit 10.8)
10.9 (1)	Form of Indemnification Agreement between Registrant and each of its directors and executive officers. (Exhibit 10.9)
10.10 (2)	Stock and Warrant Purchase Agreement dated as of March 21, 2003
10.11 (2)	Form of Registration Rights Agreement
10.12 (2)	Voting Agreement dated as of March 21, 2003
21.1	Subsidiaries of the Registrant. (filed herewith).
23.1	Consent of PricewaterhouseCoopers LLP, independent accountants. (filed herewith)
24.1	Power of Attorney (included on Page II-2)
99.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
99.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).

+ Confidential treatment granted as to certain portions.

\* Indicates a management contract or compensatory plan, contract or arrangement.

- (1) Incorporated herein by reference to the exhibits to the Company's Registration Statement on Form S-1, as amended (file No. 333-43140). The number given in parenthesis indicates the corresponding exhibit number in such Form S-1.
- (2) Incorporated herein by reference to the exhibits to the Company's Current Report on Form 8-K filed on March 24, 2003

(b)Reports on Form 8-K:

No reports on Form 8-K were filed during the fiscal quarter ended December 31, 2002.

(c)Exhibits:

The Company hereby files as part of this Annual Report on Form 10-K the exhibits listed in Item 15(a)(3) set forth above. Exhibits which are incorporated herein by reference may be inspected and copied at the public reference facilities maintained by the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the SEC's regional offices located at 233 Broadway, New York, New York 10279, and at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60611-2511. Copies of such material may be obtained by mail from the Public Reference Section of the SEC at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. The public may obtain information on the operation of the Public Reference Room by calling 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC at the address "<http://www.sec.gov>".

## INDEX TO FINANCIAL STATEMENTS

	Page
Report of Independent Accountants	31
Consolidated Balance Sheets as of December 31, 2001 and 2002	32
Consolidated Statements of Operations for the years ended December 31, 2000, 2001 and 2002	33
Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2000, 2001 and 2002	34
Consolidated Statements of Cash Flows for the years ended December 31, 2000, 2001 and 2002	35
Notes to Financial Statements	36
Schedule II - Valuation and Qualifying Accounts	47

## REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Evergreen Solar, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of stockholders' equity (deficit), and of cash flows present fairly, in all material respects, the financial position of Evergreen Solar, Inc. and its subsidiary at December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, 2001 and 2000 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a) on page 29 presents fairly, in all material respects, the information set forth therein when read in conjunction with the consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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. We believe that our audits provide a reasonable basis for our opinion.

PRICEWATERHOUSECOOPERS LLP

Boston, Massachusetts

February 27, 2003, except as to Note 13, for which the date is March 21, 2003

**EVERGREEN SOLAR, INC.**  
**CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2001 AND 2002**  
**(IN THOUSANDS, EXCEPT SHARE DATA)**

	December 31, 2001	December 31, 2002
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 2,554	\$ 1,194
Short-term investments	23,709	7,289
Accounts receivable, net of allowance for doubtful accounts of \$13 and \$140 at December 31, 2001 and 2002, respectively	488	2,848
Interest receivable	389	57
Inventory	999	2,194
Other current assets	258	1,012
	<hr/>	<hr/>
Total current assets	28,397	14,594
Restricted cash	464	464
Fixed assets, net	16,000	16,905
	<hr/>	<hr/>
Total assets	\$ 44,861	\$ 31,963
	<hr/>	<hr/>
<b>Liabilities and stockholder's equity</b>		
Current liabilities:		
Accounts payable	\$ 858	\$ 861
Accrued employee compensation	514	569
Accrued warranty	138	326
Other accrued expenses	296	294
	<hr/>	<hr/>
Total current liabilities	1,806	2,050
Stockholder's equity:		
Preferred stock; \$.01 par value, 1,000,000 shares authorized, no shares issued or outstanding at December 31, 2001 and 2002, respectively	—	—
Common stock, \$.01 par value, 30,000,000 shares authorized, 11,397,947 and 11,410,826 issued and outstanding at December 2001 and 2002, respectively	114	114
Additional paid-in capital	71,498	71,508
Accumulated other comprehensive income	249	7
Accumulated deficit	(28,157)	(41,356)
Deferred compensation	(649)	(360)
	<hr/>	<hr/>
Total stockholders' equity	43,055	29,913
	<hr/>	<hr/>
Total liabilities and stockholders' equity	\$ 44,861	\$ 31,963
	<hr/>	<hr/>

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

**EVERGREEN SOLAR, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(IN THOUSANDS, EXCEPT PER SHARE DATA)**

	Year Ended December 31,		
	2000	2001	2002
Revenues:			
Product revenues	\$ 419	\$ 1,546	\$ 5,296
Research revenues	1,753	932	1,448
	<u>2,172</u>	<u>2,478</u>	<u>6,744</u>
Total revenues	2,172	2,478	6,744
Operating expenses:			
Cost of product revenues (including stock-based compensation of \$38, \$72, and \$81 for the years ended December 31, 2000, 2001, and 2002, respectively)	2,795	9,649	12,405
Research and development expenses, including cost of research revenues (including stock-based compensation of \$116, \$147, and \$122 for the years ended December 31, 2000, 2001, and 2002, respectively)	3,382	3,063	3,692
Selling, general and administrative expenses (including stock-based compensation of \$140, \$71, and \$86 for the years ended December 31, 2000, 2001, and 2002, respectively)	2,505	4,088	4,520
	<u>8,682</u>	<u>16,800</u>	<u>20,617</u>
Total operating expenses	8,682	16,800	20,617
Operating loss	(6,510)	(14,322)	(13,873)
Interest income	1,305	1,845	674
	<u>(5,205)</u>	<u>(12,477)</u>	<u>(13,199)</u>
Net loss	(5,205)	(12,477)	(13,199)
Accretion of redeemable convertible preferred stock	(2,283)	—	—
	<u>\$(7,488)</u>	<u>\$(12,477)</u>	<u>\$(13,199)</u>
Net loss attributable to common stockholders	\$(7,488)	\$(12,477)	\$(13,199)
Other comprehensive income:			
Unrealized gain on investments	—	249	7
	<u>\$(7,488)</u>	<u>\$(12,228)</u>	<u>\$(13,192)</u>
Comprehensive loss attributable to common stockholders	\$(7,488)	\$(12,228)	\$(13,192)
Net loss per common share (basic and diluted)	\$ (2.96)	\$ (1.10)	\$ (1.16)
Weighted average shares used in computing basic and diluted net loss per common share	2,530	11,304	11,405

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

**EVERGREEN SOLAR, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)**  
**(IN THOUSANDS)**

	Common Stock		Additional	Deferred	Accumulated	Accretion of	Accumulated	Total
	Shares	Amount	Paid-In	Compensation	Deficit	Redeemable Convertible Preferred Stock	Other Comprehensive Income	Stockholders' Equity (Deficit)
<b>Balance at December 31, 1999</b>	<b>803</b>	<b>\$ 8</b>	<b>\$ 400</b>	<b>\$(300)</b>	<b>\$(10,475)</b>	<b>\$(3,135)</b>	<b>\$ —</b>	<b>\$(13,502)</b>
Issuance of common stock pursuant to IPO	3,000	30	37,737					37,767
Issuance of common stock pursuant to exercise of options	119	1	102					103
Issuance and revaluation of stock options to consultants			176					176
Deferred compensation			953	(953)				—
Compensation expense associated with stock options				294				294
Conversion of preferred to common	7,248	72	31,303			5,418		36,793
Accretion of redeemable convertible preferred stock						(2,283)		(2,283)
Net loss					(5,205)			(5,205)
<b>Balance at December 31, 2000</b>	<b>11,170</b>	<b>111</b>	<b>70,671</b>	<b>(959)</b>	<b>(15,680)</b>	<b>—</b>	<b>—</b>	<b>54,143</b>
Issuance of common stock pursuant to exercise of options	19	1	11					12
Issuance of common stock pursuant to exercise of warrants	209	2	798					800
Compensation expense associated with stock options			37	290				327
Terminated options			(19)	20				1
Other comprehensive income							249	249
Net loss					(12,477)			(12,477)
<b>Balance at December 31, 2001</b>	<b>11,398</b>	<b>\$114</b>	<b>\$71,498</b>	<b>\$(649)</b>	<b>\$(28,157)</b>	<b>\$ —</b>	<b>\$ 249</b>	<b>\$ 43,055</b>
Issuance of common stock pursuant to exercise of options	12	—	10					10
Compensation expense associated with stock options				289				289
Other comprehensive income (loss)							(242)	(242)
Net loss					(13,199)			(13,199)
<b>Balance at December 31, 2002</b>	<b>11,410</b>	<b>\$114</b>	<b>\$71,508</b>	<b>\$(360)</b>	<b>\$(41,356)</b>	<b>\$ —</b>	<b>\$ 7</b>	<b>\$ 29,913</b>

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



**EVERGREEN SOLAR, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**(IN THOUSANDS)**

	Year Ended December 31,		
	2000	2001	2002
Cash flows for operating activities:			
Net loss	\$ (5,205)	\$(12,477)	\$(13,199)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation expense	286	1,003	1,968
Bad debt expense	3	—	127
Amortization of bond premiums	—	—	331
Write-off of fixed assets	—	—	43
Compensation expense associated with employee stock options	294	290	289
Issuance of stock options to consultants	176	37	—
Changes in operating assets and liabilities:			
Inventory	(274)	(591)	(1,195)
Other current assets	(20)	(113)	(754)
Interest receivable	—	(189)	332
Accounts receivable	(557)	461	(2,487)
Accounts payable	408	197	3
Accrued expenses	705	(31)	241
Net cash used in operating activities	(4,184)	(11,413)	(14,301)
Cash flow for investing activities:			
Purchases of fixed assets	(7,100)	(9,380)	(2,916)
Purchases of investments	(38,423)	(87,041)	(10,762)
Proceeds from sale and maturity of investments	18,389	96,405	26,609
Net cash provided by (used in) investing activities	(27,134)	(16)	12,931
Cash flow from financing activities:			
Restricted cash	(464)	—	—
Proceeds from issuance of Redeemable Convertible Preferred Stock	5,617	—	—
Proceeds from the issuance of common stock for IPO	37,767	—	—
Proceeds from the exercise of stock options and warrants	103	812	10
Net cash flow provided by financing activities	43,023	812	10
Net (decrease) increase in cash and cash equivalents	11,705	(10,617)	(1,360)
Cash and cash equivalents at beginning of period	1,466	13,171	2,554
Cash and cash equivalents at end of period	\$ 13,171	\$ 2,554	\$ 1,194
Supplemental cash flow information:			
Taxes paid	6	50	32
Non-cash transactions:			
Deferred compensation	953	—	—
Termination of stock options	—	20	—

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

**EVERGREEN SOLAR, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. NATURE OF BUSINESS**

Evergreen Solar, Inc. (the "Company"), incorporated in August 1994, develops, manufactures and markets solar power products, including solar cells, panels and systems. In April 1997 the Company commenced product sales. The Company has incurred losses since inception and has an accumulated deficit, which has been funded by issuing debt and equity securities. In November 2000, the Company completed an initial public offering of 3,000,000 common shares at \$14.00 per share. After deducting underwriting commissions and other offering expenses totaling \$4.3 million, the Company received \$37.7 million from this offering.

The Company will fund its current capital commitments with the proceeds from its initial public offering, which closed in November 2000. In addition to the current capital commitments, substantial further capital expenditures will be required over the next twelve months to increase the total capacity at the Company's manufacturing facility to its target level of 10 to 14 megawatts for both lines. However, the Company's current cash, cash equivalents and short-term investments will not be sufficient to fund this capacity expansion or its operations through fiscal year 2003 and, as a result, the Company will need to raise significant additional financing in order to successfully build out its manufacturing capacity and fund its operations. As more fully described in Part I of this report under the heading "Financing Transaction," on March 21, 2003, the Company entered into a definitive purchase agreement with certain investors to raise \$29,475,000 through the issuance of up to approximately 43,200,000 shares of series A convertible preferred stock and the sale of a warrant to purchase 2,400,000 shares of our common stock. Consummation of the transactions contemplated by the purchase agreement is subject to the Company obtaining stockholder approval and other closing conditions. If the Company is able to complete this financing in a timely matter, the Company expects the second manufacturing line to become operational in late 2003 and in 2004. If the Company is not able to complete a financing in a timely manner, the Company will need to implement fundamental changes to its business and operations which will likely include substantially reducing, suspending, or terminating its capacity expansion and substantially reducing its daily operating expenditures from current levels, in which case the Company believes its cash, cash equivalents and short-term investments will then be sufficient to fund its operations through the end of fiscal year 2003.

In addition, the Company may need additional financing to execute its business plan sooner if the company needs to respond to business contingencies such as the need to enhance its operating infrastructure, respond to competitive pressures and acquire complementary businesses or necessary technologies. The Company does not know whether it will be able to raise additional financing or favorable financing terms. If adequate funds are not available or are not available on acceptable terms, the Company's ability to fund its operations, develop and expand its manufacturing operations and distribution network, or otherwise respond to competitive pressures would be significantly limited.

The Company is subject to risks common to companies in the high technology and energy industries including, but not limited to, development by the Company or its competitors of new technological innovations, dependence on key personnel, protection of proprietary technology and compliance with government regulations. Any delay in the Company's plan to scale up to full capacity may result in increased costs and could impair business operations.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

A summary of the major accounting policies followed by the Company in the preparation of the accompanying financial statements is set forth below. Certain previously reported amounts may have been reclassified to conform to the current method of presentation.

**BASIS OF PRESENTATION**

The consolidated financial statements include the accounts of the Company's wholly owned subsidiary, Evergreen Solar Securities, Inc. All material intercompany accounts and transactions have been eliminated.

**REVERSE STOCK SPLIT**

In September 2000, the Company's board of directors declared a reverse stock split of 1 share for every 2.165 shares of common stock then outstanding. The reverse stock split became effective at the date the Company's registration statement for its initial public offering was declared effective. Accordingly, the accompanying financial statements and footnotes have been restated to reflect the stock split for all periods presented.

## **CASH AND INVESTMENTS**

Cash and cash equivalents consist of cash and highly liquid investments with maturities of three months or less from the date of purchase and whose carrying amount approximates fair value.

The Company's investments are classified as available-for-sale. At December 31, 2001 and 2002 the Company held US government agency bonds, treasury notes, municipal bonds, corporate bonds and commercial paper. The investments generally mature within one year from the date of purchase and are carried at market value. During 2002, there were realized gains of \$91,000. At December 31, 2002, there were unrealized gains of \$7,000, which is reported as part of stockholder's equity.

## **CONCENTRATION OF CREDIT RISK**

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash investments and accounts receivable. The Company places its cash investments with a highly quality financial institution. With respect to accounts receivable, such receivables are primarily from distributors and integrators in the solar power industry located in the United States and throughout the world. The Company performs ongoing credit evaluations of its customers' financial conditions. One individual customer accounted for approximately 67%, 46% and 83% of total accounts receivable as of December 31, 2002, 2001 and 2000, respectively. The Company's five largest individual customers accounted for 85%, 85% and 95% of total accounts receivable of December 31, 2002, 2001, and 2000, respectively. Separately, one individual customer accounted for approximately 57%, 8% and 0% of product revenue for the years ended December 31, 2002, 2001 and 2000, respectively. The Company's five largest individual customers accounted for 80%, 94% and 99% of product revenue in 2002, 2001, and 2000, respectively.

## **INVENTORY**

Inventory is stated at the lower of cost (determined on a first-in, first-out basis) or market. Certain factors may impact the realizable value of the Company's inventory including, but not limited to, technological changes, market demand, changes in product mix strategy, new product introductions and significant changes to its cost structure. Given the Company's current production levels and the market value of its products, the Company currently sells its inventory at prices that are below the sum of its fixed and variable costs per unit. Accordingly, the Company writes down its inventory to realizable value equal to the difference between the cost of inventory and the estimated market value. In addition, estimates of reserves are made for obsolescence based on the current product mix on hand and its expected net realizability. If actual market conditions are less favorable or other factors arise that are significantly different than those anticipated by management, additional inventory write-downs or increases in obsolescence reserves may be required. The company treats lower of cost or market adjustments and inventory reserves as an adjustment to the cost basis of the underlying inventory. Accordingly, favorable changes in market conditions are not recorded to inventory in subsequent periods.

## **GUARANTOR ARRANGEMENTS**

In November 2002, the FASB issued FIN No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34." The Interpretation requires that a guarantor recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken by issuing the guarantee. The Interpretation also requires additional disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees it has issued. The accounting requirements for the initial recognition of guarantees are applicable on a prospective basis for guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for all guarantees outstanding, regardless of when they were issued or modified, during the first quarter of fiscal 2003. The adoption of FIN No. 45 did not have a material effect on the Company's consolidated financial statements. The following is a summary of the Company's agreements that we have determined is within the scope of FIN No. 45.

### ***Product warranty***

The Company provides for the estimated cost of product warranties at the time revenue is recognized. Given the Company's limited operating history, they use historical industry solar panel failure rates as the basis for the warranty provision calculation. While the Company engages in product quality programs and processes, including monitoring and evaluating the quality of component suppliers, its warranty obligation is affected by product failure rates and material usage and service delivery costs incurred in correcting a product failure. If the Company's actual product failure rates, material

usage or service delivery costs differ from estimates, revisions to the estimated warranty liability would be required. Since the Company has a limited operating history and its manufacturing process differs from industry standards, their experience may be different from the industry data used as a basis for its estimate. While the Company's methodology takes into account these uncertainties, adjustments in future periods may be required as its products mature. The following table summarizes the activity regarding the Company's warranty accrual:

Balance at January 1, 2002	\$138,000
Accruals for warranties issued during the period	188,000
Settlements made during the period	—
Balance at the end of the period	\$326,000

### ***Indemnification agreements***

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless, and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally our business partners, customers, directors and officers. The term of these indemnification agreements is generally perpetual any time after execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. However, the Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. Furthermore, the Company has a Director and Officer insurance policy that limits its exposure with indemnification agreements specifically with its directors and officers, which enables the Company to recover a portion of any future amounts paid. As a result of the Company's insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal. The Company believes the estimated fair value of agreements with parties other than its directors and officers is minimal as well.

### **FIXED ASSETS**

Fixed assets are recorded at cost. Provisions for depreciation are based on their estimated useful lives using the straight-line method over three to seven years for all laboratory and manufacturing equipment, computers, and office equipment. Leasehold improvements are depreciated over the shorter of the remainder of the lease's term or the life of the improvements. Upon retirement or disposal, the cost of the asset disposed of and the related accumulated depreciation are removed from the accounts and any gain or loss is reflected in income.

### **IMPAIRMENT OF LONG-LIVED ASSETS**

The Company's policy regarding long-lived assets is to evaluate the recoverability or usefulness of these assets when the facts and circumstances suggest that these assets may be impaired. This analysis relies on a number of factors, including changes in strategic direction, business plans, regulatory developments, economic and budget projections, technological improvements, and operating results. The test of recoverability or usefulness is a comparison of the asset value to the undiscounted cash flow of its expected cumulative net operating cash flow over the asset's remaining useful life. Any write-downs would be treated as permanent reductions in the carrying amount of the asset and an operating loss would be recognized. To date, the Company has had recurring operating losses and the recoverability of its long-lived assets is contingent upon executing its business plan that includes further reducing its manufacturing costs and significantly increasing sales. If the Company is unable to execute its business plan, the Company may be required to write down the value of its long-lived assets in future periods. No impairments were required to be recognized during the years ended December 31, 2000, 2001 and 2002.

### **REVENUE RECOGNITION**

The Company's revenue recognition policy complies with SAB 101. The Company recognizes revenue if persuasive evidence of an arrangement exists, shipment has occurred, risk of loss has transferred to the customer, sales price is fixed or determinable, and collectibility is reasonably assured. The market for solar power products is emerging and rapidly evolving. The Company currently sells its solar power products primarily to distributors, system integrators and other value-added resellers within and outside of North America, which typically resell its products to end users throughout the world. For new customers requesting credit, the Company evaluates creditworthiness based on credit applications, feedback from provided references, and credit reports from independent agencies. For existing customers, the Company evaluates creditworthiness based on payment history and known changes in their financial condition.

The Company also evaluates the facts and circumstances related to each sales transaction and consider whether risk of loss has not passed to the customer upon shipment. The Company considers whether its customer is purchasing its product for stock, and whether contractual or implied rights to return the product exist or whether its customer has an end user contractually committed. The Company does not offer rights to return its product other than for normal warranty conditions and has had no history of product returns.

At the time revenue is recognized, the Company provides for the estimated cost of product warranties and reduces revenue for estimated product returns, if any.

Revenue from research grants is recognized as services are rendered to the extent of allowable costs incurred. While the Company's accounting for research contract costs are subject to audit by the sponsoring agency, in the opinion of management, no material adjustments are expected as a result of such audits.

## RESEARCH AND DEVELOPMENT

All research and development costs are expensed as incurred.

## INCOME TAXES

The Company accounts for income taxes under the liability method, which requires recognition of deferred tax assets, subject to valuation allowances, and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. A valuation allowance is established if it is more likely than not that all or a portion of the net deferred tax assets will not be realized.

## COMPREHENSIVE INCOME

The Company adopted SFAS No. 130, "Reporting Comprehensive Income," effective January 1, 1998. Comprehensive income consists of unrealized gains on available-for-sale securities, which totaled \$7,000 and \$249,000 in 2002 and 2001, respectively, and is reflected in the Company's Consolidated Statement of Operations and the Consolidated Statement of Shareholder's Equity.

## STOCK-BASED COMPENSATION

The Company applies the accounting provisions of Accounting Principles Board ("APB") Opinion 25 and related interpretations and has elected the disclosure-only alternative permitted under Statement of Financial Accounting Standards Board ("SFAS") No. 123, Accounting for Stock-Based Compensation. The Company has disclosed herein pro forma net income (loss) in the footnotes using the fair value based method. All stock-based awards to non-employees are accounted for at their fair market value, as calculated using the Black-Scholes model in accordance with SFAS No. 123.

The Company applies APB Opinion No. 25 and related interpretations in accounting for its stock option plan. Had compensation expense for the employee stock option plan been determined based on the fair value at the grant dates for options granted under the plan consistent with the method of SFAS 123, the net income (loss) would have been as follows (in thousands, except per share data):

	2000		2001		2002	
	Net Loss Attributable To Common Stockholders	Net Loss Per Common Share	Net Loss Attributable To Common Stockholders	Net Loss Per Common Share	Net Loss Attributable To Common Stockholders	Net Loss Per Common Share
As reported	\$(7,488)	\$(2.96)	\$(12,477)	\$(1.10)	\$(13,199)	\$(1.16)
Add: Stock-based employee compensation expense included in reported results	294	0.12	290	0.03	289	0.03
Deduct: Total stock-based employee compensation expense determined under the fair-value-based method for all awards	(481)	(0.19)	(1,283)	(0.12)	(1,177)	(0.10)
Pro forma	\$(7,675)	\$(3.03)	\$(13,470)	\$(1.19)	\$(14,087)	\$(1.23)

The fair value of employee options at the date of grant were estimated using the minimum value option pricing model with the following assumptions for the years ended December 31, 2000, 2001 and 2002:

	2000	2001	2002
Expected options term	7	7	7
Risk-free interest rate	5.0 - 6.4%	4.0%	4.0%
Expected dividend yield	None	None	None
Volatility	None - 125%	90%	90%

Because the determination of the fair value of all options granted after the Company became a public entity includes an expected volatility factor, additional option grants are expected to be made and most options will vest over several years, the above effects of applying SFAS 123 in this pro forma disclosure are not likely to be representative of the effects on reported net income for future years.

Through December 31, 2000, the Company recorded \$953,000 of deferred compensation related to stock option grants to employees. The deferred compensation represents differences between the estimated fair value of common stock on the date of grant and the exercise price. The deferred compensation is being amortized and charged to operations over the vesting period of the related options.

In 2001 and 2002, the Company reduced deferred compensation into stockholders' equity by \$20,000 and \$0, respectively due to the termination of stock options.

## NET INCOME (LOSS) PER COMMON SHARE

The Company computes net income (loss) per common share by dividing net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding. The calculation of diluted net income (loss) per common share for the years ended December 31, 2000, 2001 and 2002 does not include 1,375,673, 1,525,246 and 1,146,378 potential shares of common stock equivalents outstanding at December 31, 2000, 2001 and 2002, respectively, as their inclusion would be antidilutive. Common stock equivalents include outstanding common stock options, common stock warrants and redeemable convertible preferred stock.

## SEGMENT REPORTING

The Company operates in a single segment: the sale of solar panels that generate electricity. The Company has no organizational structure dictated by product lines, geography or customer type. Major customer and geographic area revenue disclosures are presented in Note 12.

## RECENT PRONOUNCEMENTS

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." This Statement addresses financial accounting and reporting for costs associated with exit or disposal activities and replaces Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." This Statement is effective for exit or disposal activities initiated after December 31, 2002, with early application encouraged. Management does not believe SFAS No. 146 will have a material impact on the Company's financial position and results of operations.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure", which amends SFAS No. 123, "Accounting for Stock-Based Compensation." SFAS No. 148 provides specific guidance for companies choosing to transition from employee stock option accounting under the provisions of APB No. 25 to employee stock option accounting under SFAS No. 123. The Company currently accounts for employee stock option grants under APB No. 25 and will continue to do so during fiscal 2003. In addition, the provisions of SFAS No. 148 require that, in all annual and interim financial statements, companies disclose for each period for which an income statement is presented an accounting policy footnote that includes the method of accounting for stock options, total stock compensation cost (which is recognized in the income statement and would have been recognized had SFAS No. 123 been adopted for recognition purposes as of its effective date), and pro forma net income and earnings per share (where applicable) that would have been reported had SFAS No. 123 been adopted for recognition purposes as of its effective date. The Company currently provides SFAS No. 123 disclosures in the footnotes to the annual financial statements and, commencing in 2003, will be required to disclose this information in the interim financial statements as well.

In November 2002, the FASB issued FIN No. 45 “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others an interpretation of SFAS No. 5, 57, and 107 and rescission of FASB Interpretation No. 34.” The Interpretation requires that a guarantor recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken by issuing the guarantee. The Interpretation also requires additional disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees it has issued. The accounting requirements for the initial recognition of guarantees are applicable on a prospective basis for guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for all guarantees outstanding, regardless of when they were issued or modified. The adoption of FIN No. 45 did not have a material effect on the Company’s consolidated financial statements.

### 3. INVENTORY

A summary of inventories is as follows:

	December 31, 2001	December 31, 2002
Raw materials	\$816,000	\$1,236,000
Work-in-process	—	148,000
Finished goods	183,000	810,000
	<u>\$999,000</u>	<u>\$2,194,000</u>

### 4. FIXED ASSETS

Fixed assets consisted of the following at December 31, 2001 and 2002 (in thousands):

	Useful Life	December 31,	
		2001	2002
Laboratory and manufacturing equipment	3-7 years	\$10,121	\$10,997
Computer and office equipment	3-7 years	238	245
Leasehold improvements	Lesser of 15 to 20 years or lease term	5,799	6,273
Assets under construction		2,028	2,769
		<u>18,186</u>	<u>20,284</u>
Less accumulated depreciation		<u>(2,186)</u>	<u>(3,379)</u>
		<u>\$16,000</u>	<u>\$16,905</u>

Depreciation expense for the years ended December 31, 2000, 2001 and 2002 was \$286,000, \$1.0 million and \$2.0 million, respectively. During 2002, the Company disposed of assets that were no longer in service that had a cost of \$817,133 and associated accumulated depreciation of \$774,382. Many of these assets were associated with older pilot manufacturing equipment that has been replaced. The asset disposal resulted in a loss of \$42,751 to operations. As of December 31, 2002, the Company had outstanding commitments for capital expenditures of approximately \$500,000.

### 5. INCOME TAXES

Income taxes computed using the federal statutory income tax rate differ from the Company’s effective tax rate primarily due to the following for the years ended December 31, 2000, 2001 and 2002:

	2000	2001	2002
Income tax expense (benefit) at US federal statutory tax rate	\$(1,770,000)	\$(4,242,000)	\$(4,488,000)
State income taxes, net of federal tax effect	(162,000)	(786,000)	(661,000)
Permanent items	77,000	101,000	102,000
Other	(147,000)	(78,000)	(52,000)
Change in deferred tax asset valuation allowance	2,002,000	5,005,000	5,099,000
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

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As of December 31, 2002, we had federal and state net operating loss carryforwards totaling approximately \$35.1 million and \$29.6 million, respectively, available to reduce future taxable income and tax liabilities which expire at various dates between 2003 and 2023. In addition, as of December 31, 2002 we had federal and state research and development tax credit carryforwards of approximately \$735,000 and \$456,000, respectively, available to reduce future taxable income and tax liabilities which expire at various dates between 2009 and 2023. Under provisions of the Internal Revenue Code, substantial changes in our ownership may limit the amount of net operating loss carryforwards and research and development credit carryforwards, which can be used in future years. Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets. Management has considered the Company's history of losses and, in accordance with the applicable accounting standards, has fully reserved the deferred tax asset.

Deferred tax assets consist of the following at December 31, 2001 and 2002:

	2001	2002
Gross deferred tax assets	\$ 10,700,000	\$ 13,796,000
Net operating loss carryforwards	\$ 10,700,000	\$ 13,796,000
Research and development credit carryforwards	961,000	1,036,000
Capitalized R&D expenses	—	2,364,000
Accrued expenses and deferred compensation	464,000	604,000
Other	54,000	199,000
Total gross deferred tax assets	12,179,000	17,999,000
Gross deferred tax liabilities		
Depreciation	(127,000)	(847,000)
Deferred tax valuation allowance	(12,052,000)	(17,152,000)
Net deferred tax asset	\$ —	\$ —

## 6. STOCKHOLDERS' EQUITY

The Company has two classes of capital stock: common and preferred. At December 31, 2001 and 2002, there were 3,340,212 and 2,859,771, respectively, of shares of common stock reserved for grant under both the Company's 1994 Stock Option Plan and the Company's 2000 Stock Option and Incentive Plan. In August 2000, 120,000 shares were authorized for issuance under the Company's 2000 Employee Stock Purchase Plan.

In November 2000, the Company completed an initial public offering of 3,000,000 common shares at \$14.00 per share. After deducting underwriting commissions and other offering expenses totaling \$4.3 million, the Company received net proceeds of \$37.7 million from this offering. Upon the closing of the initial public offering, the Company increased the authorized common stock to 30,000,000 shares.

From December 1999 to February 2000, the Company closed its Series D Redeemable Convertible Preferred Stock financing of 10,000,000 authorized shares, resulting in the issuance of 7,343,323 shares at \$2.50 per share for \$18,358,308 cash proceeds. In 1998, 3,442,547 shares of Series C Redeemable Convertible Preferred Stock were issued at \$2.00 per share. In 1996, 2,781,666 shares of Series B Redeemable Convertible Preferred Stock were issued at \$1.50 per share. Upon the closing of the initial public offering the preferred stockholders authorized the conversion of all shares of preferred stock into common stock in a 2.165 to 1 ratio.

## 7. STOCK BASED COMPENSATION

On October 24, 1994, the Board of Directors approved the Company's 1994 Stock Option Plan (the "1994 Plan"), whose purpose is to encourage employees and other individuals who render services to the Company, by providing opportunities to purchase stock in the Company. The 1994 Plan authorizes the issuance of incentive stock options and nonqualified stock options. The 1994 Plan was terminated as to all new issuances of options effective as of the closing of the Company's initial public offering. All options granted will expire ten years from their date of issuance. Incentive stock options granted generally have a four-year vesting period from their date of issuance and nonqualified options granted vest immediately upon their issuance.

In August 2000, the Board of Directors and stockholders approved the Company's 2000 Stock Option and Incentive Plan (the "2000 Plan"), which became effective on the closing of the Company's initial public offering. The purpose is to encourage employees and other individuals who render services to the Company, by providing opportunities to purchase stock in the Company. The 2000 Plan authorizes the issuance of incentive stock options and nonqualified stock options. All options granted will expire ten years from their date of issuance. Incentive stock options granted generally have a four-year vesting period from their date of issuance and nonqualified options granted vest immediately upon their issuance.



The following is a summary of stock option activity:

	Shares	Weighted-Average Exercise Price
<b>Outstanding at December 31, 1999</b>	<b>432,043</b>	<b>\$0.78</b>
Granted	427,151	7.52
Exercised	(119,550)	0.86
Terminated	—	—
<b>Outstanding at December 31, 2000</b>	<b>739,644</b>	<b>4.66</b>
Granted	400,100	5.14
Exercised	(19,391)	0.95
Terminated	(5,041)	3.23
<b>Outstanding at December 31, 2001</b>	<b>1,115,312</b>	<b>4.94</b>
Granted	60,000	1.86
Exercised	(11,429)	0.84
Terminated	(17,505)	3.34
<b>Outstanding at December 31, 2002</b>	<b>1,146,378</b>	<b>\$4.84</b>

Summarized information about stock options outstanding is as follows:

	Range of Exercise Prices	Number Outstanding	Options Outstanding		Options Exercisable	
			Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
	\$ 0.22 – \$ 0.81	35,082	7.46	\$ 0.68	25,082	\$ 0.63
	0.87 – 0.87	262,269	6.42	0.87	201,983	0.87
	1.00 – 1.69	12,000	9.68	1.37	12,000	1.37
	2.17 – 2.17	140,412	7.03	2.17	71,127	2.17
	2.32 – 2.50	17,000	9.97	2.41	9,000	2.36
	2.59 – 2.59	182,600	8.94	2.59	45,650	2.59
	2.63 – 5.00	157,825	8.39	4.47	74,742	4.39
	6.38 – 9.60	124,171	7.93	7.21	65,804	7.11
	10.00 – 12.65	72,000	8.11	10.83	34,500	10.91
	14.00 – 19.00	143,019	7.84	14.56	74,506	14.74
<b>December 31, 2002</b>	<b>\$ 0.22 – \$19.00</b>	<b>1,146,378</b>	<b>7.73</b>	<b>\$ 4.84</b>	<b>614,394</b>	<b>\$ 4.51</b>

At December 31, 2000, 2001 and 2002, options exercisable were 169,947, 342,622, and 614,394, respectively. Estimated weighted average fair value of options granted in fiscal years 2000, 2001 and 2002 were \$9.97, \$4.05 and \$1.86, respectively, on the date of grant.

## 8. EMPLOYEE STOCK PURCHASE PLAN

In September 2000, the Company's Board of Directors adopted a non-compensatory Employee Stock Purchase Plan ("the ESPP"). Under the ESPP, eligible employees of the Company who elect to participate are granted options to purchase common stock at a 15 percent discount from the market value of such stock. The ESPP permits an enrolled employee to make contributions to purchase shares of common stock by having withheld from their salary an amount between 0.1 percent and 10 percent of compensation, and a maximum of 25 shares per employee can be issued during each six-month payment period. The total number of shares of common stock that may be issued pursuant to options granted under the ESPP is 120,000. As of December 31, 2002, there were 1,450 shares issued under the ESPP.

## 9. WARRANTS

On April 30, 1998 and May 29, 1998, pursuant to the Series C Redeemable Convertible Preferred Stock financing, the Company granted the

purchasers of Series C Redeemable Convertible Preferred Stock warrants to purchase an aggregate of 636,027 shares of common stock at a ratio of one warrant for every \$10.83 invested. The warrants were exercisable at \$4.33 per share.

Effective April 30, 2001, a shareholder exercised in full a warrant to purchase up to 16,904 shares of the Company's Common Stock at an exercise price equal to \$4.33 per share. Pursuant to the warrant's cashless exercise feature, the Company issued to the shareholder 9,728 shares of the Company's Common Stock. Effective May 3, 2001, a second shareholder exercised in full a warrant to purchase up to 9,237 shares of the Company's Common Stock at an exercise price equal to \$4.33 per share. Pursuant to the warrant's cashless exercise feature, the Company issued to the second shareholder 5,843 shares of the Company's Common Stock. Effective May 23, 2001, a third shareholder exercised in full a warrant to purchase up to 184,757 shares of the Company's Common Stock at an exercise price equal to \$4.33 per share. The Company made such issuances in reliance upon an exemption from the registration provisions of the Securities Act of 1933 set forth in Section 4(2) thereof as a transaction by an issuer not involving a public offering. Effective July 30, 2001, a fourth shareholder exercised in full a warrant to purchase up to 15,195 shares of the Company's Common Stock at an exercise price equal to \$4.33 per share. Pursuant to the warrant's cashless exercise feature, the Company issued to the fourth shareholder 8,476 shares of the Company's Common Stock. The Company made such issuances in reliance upon an exemption from the registration provisions of the Securities Act of 1933 set forth in Section 4(2) thereof as a transaction by an issuer not involving a public offering.

As of December 31, 2002, there were no warrants outstanding, as any unexercised warrants expired on December 22, 2002.

## **10. EMPLOYEES' SAVINGS PLAN**

The Company established a 401(k) plan in 1996 for eligible employees. Under the provisions of the plan, eligible employees may voluntarily contribute a portion of their compensation up to the statutory limit. In addition, the Company can make a matching contribution at its discretion. The Company has not made any contribution to the plan.

## **11. COMMITMENTS**

### **LEASE**

On March 13, 2000, the Company entered into a ten-year lease commencing July 1, 2000, for office and manufacturing space in Marlboro, Massachusetts. Pursuant to the terms of the lease agreement, the Company will pay annual rent ranging from \$464,000 in the first year to \$534,000 during the last year of the lease. Rent is payable on the first day of each month and is collateralized by a \$464,000 standby letter of credit. In connection with this arrangement, the Company invested in a certificate of deposit pledged to a commercial bank. This certificate of deposit was classified as "restricted cash" on the December 31, 2001 and 2002 balance sheet. The following is a schedule, by year, of future minimum rental payments required under the ten-year lease that have remaining noncancelable lease terms in excess of one year as of December 31, 2002:

2003	\$ 488,672
2004	492,188
2005	502,734
2006	506,250
2007	516,797
Thereafter	1,198,828
Total	<u>\$3,705,469</u>

Rent expense was \$563,738, \$795,116, and \$674,296 for the years ended December 31, 2000, 2001, and 2002.

### **LICENSE AGREEMENT**

In September 1994, the Company signed an agreement to license String Ribbon technology from a professor at Massachusetts Institute of Technology. Concurrently, the Company hired the professor as a consultant. This agreement provides the Company, its successors, assigns, and legal representatives an irrevocable, worldwide right and license in and to the technology and licensed patents, including the right to make, have made, use, lease, sub-license, and sell products and to enforce any of the patent rights of the licensed patents. The license is exclusive except for rights to the licensed patents held by the U.S. Department of Energy. In exchange for these rights, the consultant will earn royalties on sales of products through 2004. The Company incurred \$15,000, \$25,000 and \$25,000 in royalty expense for the years ended December 31, 2000, 2001 and 2002, respectively. The Company can, at any time, cease utilization of the technology with no further royalty payments.

## 12. SEGMENT INFORMATION

The Company operates as one operating segment. The following table summarizes the Company's concentration of total revenue:

% of Total Revenue	Year Ended December 31,	
	2001	2002
<b>By geography:</b>		
USA	73%	46%
Germany	5%	44%
Japan	14%	2%
All other	8%	8%
	<u>100%</u>	<u>100%</u>
<b>By customer:</b>		
National Institute of Industry Standards	48%	11%
National Renewable Energy Laboratory	0%	10%
European distributor	5%	44%
U.S. distributor	33%	4%
All other	14%	31%
	<u>100%</u>	<u>100%</u>

## 13. SUBSEQUENT EVENT

On March 21, 2003 the Company entered into the Stock and Warrant Purchase Agreement with Perseus 2000, L.L.C., Nth Power Technologies Fund II, LP, Nth Power Technologies Fund II-A, LP, RockPort Capital Partners, L.P., RP Co-Investment Fund, I, Micro-Generation Technology Fund, LLC, UVCC Fund II, UVCC II Parallel Fund, L.P., Caisse de dépôt et placement du Québec, CDP Capital – Technology Ventures U.S. Fund 2002 L.P., Beacon Power Corporation, Massachusetts Technology Park Corporation, Zero Stage Capital VII, L.P., Zero Stage Capital (Cayman) VII, L.P., Zero Stage Capital SBIC VII, L.P., IMPAX Environmental Markets plc, Merrill Lynch New Energy Technology Fund, MLIIF New Energy Fund, PNE Invest Limited, Odyssey Fund, SAM Private Equity Energy Fund LP, SAM Sustainability Private Equity LP and SAM Smart Energy pursuant to which the Company have agreed to issue, and the purchasers has agreed to purchase from the Company, \$29,375,000 of Series A convertible preferred stock at a per share purchase price to be calculated as of the closing date. The per share purchase price to be paid for the shares of Series A convertible preferred stock will be 85% of the 60-day trading average closing bid price of the Company's common stock for the period ending two trading days prior to the closing date of the private placement. However, in no event will the per share price exceed \$1.12 (which is 85% of the 60-day trading average of the closing prices of the Company's common stock for the period ending on March 17, 2003), or be less than \$0.68. Additionally, the Company agreed to issue, and Beacon Power Corporation agreed to purchase for a purchase price of \$100,000, a warrant to purchase 2,400,000 shares of common stock at an exercise price equal to the per share price of the Series A convertible preferred stock paid by the purchasers, plus \$2.25. The shares of Series A convertible preferred stock will be initially convertible into shares of common stock on a 1-to-1 basis (subject to adjustment to account for the payment of dividends, to take into account certain changes to the Company's capital structure and to account for future dilutive issuances). Depending upon the final per share price paid by the purchasers for such shares, the Series A convertible preferred stock will, when issued, represent between 70% and 79% of the currently issued and outstanding shares of the Company's capital stock. The closing of the transactions contemplated by the purchase agreement is subject to certain conditions, including, among other things, obtaining stockholder approval. If approved by stockholders, it is anticipated that the closing of the private placement would occur as soon as practicable thereafter.

## 14. UNAUDITED QUARTERLY RESULTS

The following tables set forth unaudited selected financial information for the periods indicated. This information has been derived from unaudited consolidated condensed financial statements, which, in the opinion of management, include all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of such information. The Company's independent accountants have not audited this information. The results of operations for any quarter are not necessarily indicative of the results to be expected for any future period.

**QUARTERLY STATEMENT OF OPERATIONS**  
**(IN THOUSANDS, EXCEPT PER SHARE DATA)**  
**UNAUDITED**

	<b>MAR 31, 2001</b>	<b>JUN 30, 2001</b>	<b>SEP 30, 2001</b>	<b>DEC 31, 2001</b>	<b>MAR 31, 2002</b>	<b>JUN 30, 2002</b>	<b>SEP 30, 2002</b>	<b>DEC 31, 2002</b>
Revenues:								
Product revenues	\$ 146	\$ 212	\$ 424	\$ 764	\$ 913	\$ 1,075	\$ 1,461	\$ 1,847
Research revenues	331	348	153	100	236	207	641	364
Total revenues	477	560	577	864	1,149	1,282	2,102	2,211
Operating expenses:								
Cost of product revenues	1,457	1,906	2,852	3,430	2,904	2,791	3,041	3,669
Research and development expenses	920	903	596	644	854	989	935	915
Selling, general and administrative expenses	1,128	1,059	1,025	878	1,054	1,187	991	1,287
Total operating expenses	3,505	3,868	4,473	4,952	4,812	4,967	4,967	5,871
Operating loss	(3,028)	(3,308)	(3,896)	(4,088)	(3,663)	(3,685)	(2,865)	(3,660)
Interest income	639	479	416	310	242	210	133	89
Net loss	(2,389)	(2,829)	(3,480)	(3,778)	(3,421)	(3,475)	(2,732)	(3,571)
Other comprehensive income (loss):								
Unrealized gain (loss) on investments	122	(29)	159	(3)	155	(62)	(46)	(40)
Comprehensive loss attributable to common stockholders	\$ (2,267)	\$ (2,858)	\$ (3,321)	\$ (3,781)	\$ (3,266)	\$ (3,537)	\$ (2,778)	\$ (3,611)
Net loss per common share (basic and diluted)	\$ (0.21)	\$ (0.25)	\$ (0.31)	\$ (0.33)	\$ (0.30)	\$ (0.30)	\$ (0.24)	\$ (0.31)
Weighted average shares used in computing basic and diluted net loss per common share	11,173	11,261	11,385	11,394	11,398	11,404	11,408	11,410

## SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at beginning of period	Charged to operations	Deductions	Balance at end of period
<b>Year ended December 31, 2000</b>				
Reserves and allowances deducted from assets accounts:				
Valuation allowance for deferred tax assets	\$ 5,045,000	\$2,002,000	\$ —	\$ 7,047,000
Allowance for doubtful accounts	10,000	3,000	—	13,000
Accrued warranty reserve	22,000	26,000	—	48,000
<b>Year ended December 31, 2001</b>				
Reserves and allowances deducted from assets accounts:				
Valuation allowance for deferred tax assets	\$ 7,047,000	\$5,005,000	\$ —	\$12,052,000
Allowance for doubtful accounts	13,000	—	—	13,000
Accrued warranty reserve	48,000	90,000	—	138,000
<b>Year ended December 31, 2002</b>				
Reserves and allowances deducted from assets accounts:				
Valuation allowance for deferred tax assets	\$12,052,000	\$5,100,000	\$ —	\$17,152,000
Allowance for doubtful accounts	13,000	127,000	—	140,000
Accrued warranty reserve	138,000	188,000	—	326,000



## **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned on this 27th day of March, 2003, thereunto duly authorized.

EVERGREEN SOLAR, INC.

By: /s/ MARK A. FARBER

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Mark A. Farber  
Chief Executive Officer,  
President and Director

## POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Evergreen Solar, Inc., hereby severally constitute and appoint Mark A. Farber and Richard G. Chleboski, and each of them singly, our true and lawful attorneys, with full power to both of them and each of them singly, to sign for us and in our names in the capacities indicated below, any amendments to this Annual Report on Form 10-K, and generally to do all things in our names and on our behalf in such capacities to enable Evergreen Solar, Inc. to comply with the provisions of the Securities Exchange Act of 1934, as amended, and all the requirements of the Securities and Exchange Commission.

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.

Name	Title	Date
<u>/s/ MARK A. FARBER</u> Mark A. Farber	Chief Executive Officer, President and Director (Principal Executive Officer)	March 27, 2003
<u>/s/ RICHARD G. CHLEBOSKI</u> Richard G. Chleboski	Chief Financial Officer, Treasurer, Secretary, Director (Principal Financial Officer, and Principal Accounting Officer)	March 27, 2003
<u>/s/ ROBERT W. SHAW, JR.</u> Robert W. Shaw, Jr.	Chairman of the Board of Directors	March 27, 2003
<u>/s/ WILLIAM P. SOMMERS</u> William P. Sommers	Director	March 27, 2003
<u>/s/ BROWN F. WILLIAMS</u> Brown F. Williams	Director	March 27, 2003
<u>/s/ MASON WILLRICH</u> Mason Willrich	Director	March 27, 2003

## Certifications

I, Mark A. Farber, certify that:

1. I have reviewed this annual report on Form 10-K of Evergreen Solar;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 27, 2003

/s/ Mark A. Farber

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Mark A. Farber  
Chief Executive Officer

I, Richard G. Chleboski, certify that:

1. I have reviewed this annual report on Form 10-K of Evergreen Solar;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 27, 2003

/s/ Richard G. Chleboski

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Richard G. Chleboski  
Chief Financial Officer