

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Request to Approve Project for SB 71 Sales and Use Tax Exclusion¹

**FIRST SOLAR, INC.
Application No. 10-SM004**

Wednesday, November 17, 2010

Prepared By: *Martha Alvarez*

SUMMARY

Applicant – First Solar, Inc.

Location – Santa Clara, Santa Clara County

Industry – Solar: Thin-Film Photovoltaic

Project – Construct New Thin-Film Photovoltaic Manufacturing Facility

Value of Qualified Property – \$37,700,000

Estimated Sales and Use Tax Exclusion Amount² – \$3,430,700

Application Score –

Fiscal Benefits Points:	575
<u>Environmental Benefits Points:</u>	<u>486</u>
Net Benefits Score:	1,061

<u>Additional Benefits Points:</u>	<u>40</u>
Total Score:	1,101

Staff Recommendation – Approval

THE APPLICANT

First Solar, Inc. (“First Solar” or the “Applicant”), a publicly traded corporation established in Delaware in 2006, and subsidiaries are one of the world’s largest manufacturers of thin-film

¹ All capitalized terms not defined in this document are defined in the Program’s statute and regulations.

² This amount is calculated based off of the average statewide sales tax rate of 9.1%.

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photovoltaic (“PV”) solar modules. According to the Applicant, First Solar’s technological innovation enabled the company to be the first commercial-scale solar module manufacturer to manufacture modules for an average cost of less than \$1.00 per watt. The Applicant has further reduced its cost per watt to \$0.76 and has expanded its manufacturing capacity to an annualized run rate of 59 MW per line as of the second quarter of 2010.

First Solar’s utility-scale PV project development group is based in California, where the Applicant permanently employs over 130 workers primarily in San Francisco and Oakland. First Solar currently manufactures its thin-film PV solar modules at plants in Ohio, Germany and Malaysia. First Solar’s executive offices are based in Arizona and its research and development operations in Ohio.

The major shareholders (10 percent or greater) of First Solar Inc. are:

Capital World Investors
Estate of John Walton et al.

The corporate officers are:

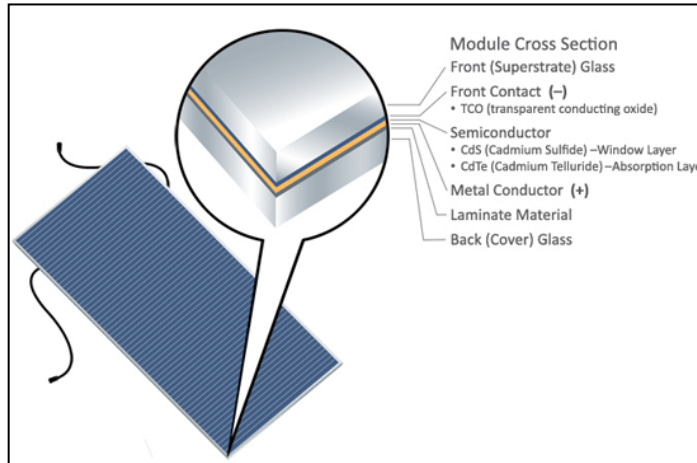
Robert Gillette, CEO
Jens Meyerhoff, CFO and President Utility Systems Business Group
Bruce Sohn, President

THE PROJECT

Shortly after the enactment of SB 71 in March 2010, First Solar finalized its decision to locate its thin-film solar PV pilot development and production facility in Santa Clara, California (“Facility”). Since the execution of the lease of the Facility in April 2010, First Solar has spent over \$8 million building out the Facility in terms of tenant improvements.

First Solar is currently in the early stages of acquiring, installing and commissioning the manufacturing equipment that will comprise the Santa Clara Facility, which currently has 45 employees. When the Facility is in full production, First Solar expects to employ over 180 employees. In all, First Solar expects to invest between \$35 and \$40 million in manufacturing equipment.

Once fully operational, 100 percent of the Facility’s output is expected to be installation-ready thin-film solar PV modules, each capable of generating electricity for up to 30 years or more. According to the Applicant, by integrating each production step, First Solar manufactures the modules on high throughput, automated lines from semiconductor deposition to final assembly and test—all in one continuous process. The whole flow, from a piece of glass to a completed solar module takes less than 2.5 hours.



First Solar’s Current Module Cross Section

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Two Manufacturing Coater Equipment	\$16,000,000
Three Manufacturing Thin Film Coater Equipment	12,900,000
Manufacturing Automation Equipment	2,200,000
Manufacturing Material Handling and Metrology Equipment	1,500,000
Manufacturing Failure Analysis and Process Control Equipment	1,300,000
Manufacturing Equipment Costing Less than \$1 million each	<u>3,800,000</u>
Total	<u>\$37,700,000</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff’s report are estimated costs. At the termination of the conveyance/reconveyance agreement a finalized Project equipment list will be prepared detailing the value of the Project equipment conveyed and reconveyed and detailing the actual tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variations from the costs shown in the Application and in this report may occur prior to the closing due to increased costs of certain components of the Project from original estimates, and other reasons. In addition, such costs may vary after closing due also to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in law or regulation, or for other reasons.

TIMELINE

First Solar leased the Facility in April 2010, following the enactment of SB 71. First Solar began building out the leased Facility in June 2010 and the construction was completed in October 2010 for an investment cost of approximately \$10 million for the leasehold improvements. The purchase and installation of the manufacturing equipment is expected to occur during an 8 month

period beginning in October 2010 and ending in May 2011. Once the purchase and installation is fully completed in 2011, First Solar hopes to start using the Qualified Property and commence operations in May 2011.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated at \$37,700,000 and the total net benefits are estimated at \$209,831 for the Project. The Project received a Total Score of 1,101 which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 486 which exceeds the 100 point threshold.

- A. **Fiscal Benefits (575 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from First Solar's projected sales taxes, personal income taxes paid by the firm's employees, corporation taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to an estimated \$1,971,559 resulting in a Fiscal Benefits Score of 575 points for the Project.

- B. **Environmental Benefits (486 points)**. CAEATFA staff estimated that the Project will result in an environmental benefits value of \$1,668,971 over the life of the Facility resulting in an Environmental Benefits Score of 486 points for the Project. These benefits will be derived from the capacity of solar PV modules to generate electricity from alternative sources, thereby reducing the need for traditionally generated electricity.

- C. **Additional Benefits (40 of 200 points)**. Applicants may earn up to 200 additional points for their final score. The Applicant submitted information and received 40 additional points.
 - 1) **Permanent Jobs (0 of 40 points)**. The Applicant's Project will support a total of 144 permanent jobs at their Facility. CAEATFA staff estimated that approximately 14 of these jobs will be attributable to a marginal increase in jobs created due to the approved sales and use tax exclusion. Zero (0) points were awarded because the marginal increase in jobs created does not meet the required threshold.

 - 2) **Construction Jobs (0 of 20 points)**. The Applicant's Project will support a total of 30 construction jobs at their Facility. CAEATFA staff estimated that approximately 3 of these jobs will be attributable to a marginal increase in jobs created due to the approved sales and use tax exclusion. Zero (0) points were awarded because the marginal increase in jobs created does not meet the required threshold.

- 3) **Non-CA Environmental Benefits (40 of 40 points)**. The Applicant's total out-of-state non-greenhouse gas pollution benefits are valued at \$479,737 resulting in a Non-CA Environmental Benefits Score of 40 points for the Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

First Solar has received the following permits from the City of Santa Clara: business license, building and hazardous materials, hazardous waste generators, occupancy and building permits. First Solar has also submitted a notice of intent for stormwater discharge to the Regional Water Quality Control Board. First Solar has also received the discharge and AWN permits from the City of San Jose and Santa Clara County, respectively.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

CAEATFA FEES

In accordance with CAEATFA regulations,³ the Applicant paid CAEATFA an Application Fee of \$5,000 and will pay CAEATFA an Administrative Fee of up to \$150,800 if approved for a sales and use tax exclusion.

RECOMMENDATION

Staff recommends approval of Resolution No. 10-SM004 for First Solar Inc.'s purchase of Qualified Property in an amount not to exceed \$37,700,000, anticipated to result in an approximate sales and use tax exclusion value of \$3,430,700.

³ California Code of Regulations Title 4, Division 13, Section 10036.

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A TITLE
CONVEYANCE AGREEMENT WITH FIRST SOLAR, INC.**

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **First Solar, Inc.** (the “Applicant”), for financial assistance in the form of a conveyance/reconveyance of title agreement (the “Agreement”) regarding tangible personal property for the design, manufacture, production or assembly of Advanced Transportation Technologies or Alternative Source products, components, or systems (“Qualified Property”) as more particularly described in the staff summary and in the Applicant’s Application to the Authority (collectively, the “Project”); and

WHEREAS, the Applicant has requested the Authority to enter into the Agreement transferring title of Project equipment with a cost not to exceed \$37,700,000 over a period of three years; and

WHEREAS, the Agreement will provide that the Applicant will, prior to any use of the Qualified Property, transfer title at no cost to the Authority from time to time as purchases of Qualified Property are made and the Authority will then transfer title back to the Applicant without having taken possession of the Qualified Property; and

WHEREAS, the Applicant believes that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Qualified Property pursuant to California Revenue and Taxation Code Section 6010.8; and

WHEREAS, approval of the terms of the Agreement and authority for the Executive Director, Deputy Executive Director or Chair of the Authority, to execute the necessary documents to effectuate the Agreement is now sought.

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Project constitutes a “project” within the meaning of Public Resources Code Section 26003(g)(2).

Section 2. The requested conveyance agreement constitutes “financial assistance” within the meaning of Public Resources Code Section 26003(e)(2).

Section 3. The Applicant is a “participating party” within the meaning of Public Resources Code Section 26003(f).

Section 4. The Executive Director, Deputy Executive Director, or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Executive Director shall deem appropriate, provided

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that the amount of the Qualified Property to be purchased may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Agreement between the Applicant and the Authority, as filed with the Authority prior to this meeting, is hereby approved. The Authorized Signatories are hereby authorized and directed, for and on behalf and in the name of the Authority, to execute, acknowledge and deliver to the Applicant the Agreement in substantially the form filed with or approved by the Authority, with such insertions, deletions or changes therein as the Authorized Signatory executing the same, may require or approve, and with particular information inserted therein in substantial conformance with the staff summary and in the Applicant's Application to the Authority, such approval to be conclusively evidenced by the execution and delivery thereof. The Authority understands and agrees that pursuant to the terms of the Agreement, the obligations of the Applicant may, under some circumstances be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including (without limitation) the execution and delivery of any and all documents and certificates they may deem necessary or advisable in order to consummate the Agreement and otherwise effectuate the purposes of this resolution.

Section 7. The Applicant shall assure CAEATFA that all Qualified Property conveyance pursuant to the Agreement shall be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Agreement shall only apply to Qualified Property that the Applicant certifies will be installed, maintained and operated at facilities within the State of California.

Section 9. The adoption by the Authority of this Resolution for the Applicant shall not be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project or in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement, as defined in CAEATFA Regulations Section 10035(A), is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty days if necessary.