

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

*Request to Approve Project for SB 71 Sales and Use Tax Exclusion (STE)<sup>1</sup>*

**SORAA, INC  
Application No. 12-SM001**

**Tuesday, February 21, 2012**

Prepared By: *Heather Williams*

**SUMMARY**

**Applicant** – Soraa, Inc

**Location** – Fremont (Alameda County)

**Industry** – Energy Efficient LED (Light-Emitting Diode) Lighting Manufacturing

**Project** – Expansion of Fremont Facility for New LED Production Lines

**Value of Qualified Property** – \$57,002,457

**Estimated Sales and Use Tax Exclusion Amount<sup>2</sup>** – \$4,617,199

**Estimated Net Benefits** - \$28,527,434

**Application Score<sup>3</sup>** -

Fiscal Benefits Points:	513
<u>Environmental Benefits Points:</u>	<u>6,666</u>
<b>Net Benefits Score:</b>	<b>7,179</b>

<u>Additional Benefits Points:</u>	<u>40</u>
<b>Total Score:</b>	<b>7,219</b>

**Staff Recommendation** – Approval

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

<sup>2</sup> This amount is calculated based upon the average statewide sales tax rate of 8.1%.

<sup>3</sup> Point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

**THE APPLICANT**

Soraa, Inc. (“Soraa” or “Applicant”) was incorporated in 2007 in Delaware and is headquartered in Fremont, California. Soraa is a clean-tech semiconductor company that specializes in the use of gallium nitride (GaN) in the development of cost-effective, energy-efficient light-emitting diodes (“LEDs”). In addition to LEDs, Soraa is also commercializing a new generation of high efficiency chip-based lasers for consumer, biomedical, defense and industrial applications.

The major shareholders (10.0% or greater) of Soraa are:

Khosla Ventures

The corporate officers of Soraa are:

Eric Kim, Chief Executive Officer  
Udi Var Sela, Vice President of Finance  
Michael Krames, Chief Technology Officer

**THE PROJECT**

Soraa is developing LEDs to provide energy-efficient solid-state lighting for general illumination. Soraa uses a GaN on GaN technology. All white LEDs are made from GaN crystals grown onto a substrate. Sapphire and silicon carbide have been used as the substrate for almost all LEDs made. Soraa however uses GaN as the substrate. Soraa claims they are the only ones to use this technology, producing more light than any other LED on the market.

Additionally, the Applicant represents the light will be five to ten times more efficient than standard halogen incandescent bulbs currently on the market and would therefore consume a fraction of energy compared to current bulbs which are typically used today. Compared to CFL (compact fluorescent light) technology, LEDs contain no mercury and save significant energy with the same production energy. Soraa will first focus on releasing a LED based MR16 lamp for which, according to Soraa, there is currently no energy efficient alternative due to its compact form factor. MR 16 lamps can be used in place of standard incandescent light bulbs in applications including residential and retail lighting.



**Soraa 12 Watt LED based MR16 Lamp**  
*(equivalent to a 50 Watt halogen MR16 lamp)*

**ANTICIPATED COSTS OF QUALIFIED PROPERTY**

The anticipated Qualified Property purchases are listed below:

Deposition/Evaporation Equipment 2011 <sup>4</sup>	\$ 4,003,232
Deposition/Evaporation Equipment 2012	3,863,831
Deposition/Evaporation Equipment 2013	3,912,006
Epitaxial Equipment 2011	7,222,289
Epitaxial Equipment 2012	4,741,975
Epitaxial Equipment 2013	3,725,720
Etching Equipment 2011	1,765,750
Etching Equipment 2012	1,053,772
Etching Equipment 2013	1,862,860
Packaging Equipment 2011	
Die Attachment Equipment	657,931
Wire Bonding Equipment	164,483
Packaging Equipment 2012	
Die Attachment Equipment	843,018
Wire Bonding Equipment	210,754
Packaging Equipment 2013	
Die Attachment Equipment	1,043,202
Wire Bonding Equipment	260,800
Photolithography Equipment 2011	2,067,718
Photolithography Equipment 2012	1,931,916
Photolithography Equipment 2013	2,608,004
Testing/Parametric/Analysis Equipment 2011	3,406,341
Testing/Parametric/Analysis Equipment 2012	3,161,317
Testing/Parametric/Analysis Equipment 2013	2,980,576
Wafer Dicing/Singulation Equipment 2011	1,523,243
Wafer Dicing/Singulation Equipment 2012	1,756,287
Wafer Dicing/Singulation Equipment 2013	2,235,432
<b>Total</b>	<b><u>\$57,002,457</u></b>

*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.*

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<sup>4</sup> Property purchased prior to the approval of the Application and subsequent conveyance and reconveyance of title of the property between the Applicant and CAEATFA is eligible under the Program if the property has not yet been put to functional use.

## **TIMELINE**

Construction for the Facility began in April 2010 with Phase 1, consisting of offices and laboratories, being completed in August 2010. Phase 2, or the manufacturing space, was completed in December 2010 and Soraa anticipates the production phase will begin in the first half of 2012.

## **PROJECT EVALUATION**

### **NET BENEFITS**

The total cost of the Qualified Property purchases is anticipated to be \$57,002,457 and the total net benefits are valued at an estimated \$28,527,434 for the Project. The Project received a Total Score of 7,219 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 6,666 points, which exceeds the 100 point threshold.

- A. Fiscal Benefits (513 points).** The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to an estimated \$2,368,664 resulting in a Fiscal Benefits Score of 513 points for the Project.
- B. Environmental Benefits (6,666 points).** The Project will result in an estimated \$30,775,968 of total pollution benefits over the lifetime of the Qualified Property resulting in an Environmental Benefits Score of 6,666 points for the Project. These benefits derive from the manufacturing of energy efficient LED lighting, which offsets the need for fossil fuel derived sources of energy. The significant environmental benefits from this project stem from the fact that LED light bulbs are substantially more efficient than standard incandescent bulbs and last much longer. As a result, each bulb produced has the potential to produce a significant savings in energy consumption.
- C. Additional Benefits (40 of 200 points).** Applicants may earn up to 200 additional points for their Total 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 180 permanent jobs at its Facility. CAEATFA estimates that 14 of these jobs will be attributable to a marginal increase in jobs created due to the approved STE. Zero points were awarded because the marginal increase in jobs does not meet the required threshold.

2. **Construction Jobs (0 of 20 points).** The Applicant’s Project will support a total of zero construction jobs at its Facility. CAEATFA estimates that approximately zero jobs will be attributable to a marginal increase in jobs created due to the approved STE. Zero points were awarded because the marginal increase in jobs does not meet the required threshold. Installation was completed by third party contractors, so there are no estimates for construction jobs.
  
3. **Non-CA Environmental Benefits (40 of 40 points):** The Applicant’s total value of out-of state non-greenhouse gas pollution benefits are valued at \$9,431,522 resulting in a Non-CA Environmental Benefits Score of 40 points for the project.

## **STATUS OF PERMITS/OTHER REQUIRED APPROVALS**

Soraa has already acquired all permits needed for the current Fremont facility.

## **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,<sup>5</sup> the Applicant has paid CAEATFA an Application Fee of \$5,000 and will pay CAEATFA an Administrative Fee up to \$228,009.

## **RECOMMENDATION**

Staff recommends approval of Resolution No. 12-SM001 for Soraa, Inc.’s purchase of Qualified Property in an amount not to exceed \$57,002,457 anticipated to result in an approximate sales and use tax exclusion value of \$4,617,199.

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<sup>5</sup> California Code of Regulations Title 4, Division 13, Article 2, Section 10036

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

February 21, 2012

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Soraa, 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 an estimated cost not to exceed \$57,002,457 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).

**Agenda Item – 4.B.1**  
**Resolution No. 12-SM001**  
**Application No. 12-SM001**

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 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.