CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY

Board Meeting Date: Tuesday, September 15, 2026

Request to Approve Project for a Sales and Use Tax Exclusion[1]

Quartz & Silicon Materials Company Ltd
Application No. 26-SM003

Prepared By: *Willy Chen, Program Analyst*

SUMMARY

Applicant: Quartz & Silicon Materials Company Ltd

Location: Chula Vista, San Diego County

Industry: Silicon Wafers

Project: New Silicon Wafers Manufacturing Facility (Alternative Source)

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount[2]
$176,468,600	$14,999,831

Estimated Net Benefit[3]	Dollar Value	Points Earned
Estimated Fiscal Benefits	$21,042,994	1,403
Estimated Environmental Benefits	$4,142,607	276
Additional Benefits	N/A	125
Total	**$25,185,601**	**1,804**
Estimated Quantifiable Net Benefit	$10,185,769	N/A

Competitive Criteria Score: 205

Staff Recommendation: Approval

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[1] All capitalized terms not defined in this document are defined in the STE Program’s statutes and regulations.
[2] This amount is calculated based on the average statewide sales tax rate of 8.5%.
[3] Applications that earn a Total Score of at least 1,000 points and an Environmental Benefits Score of over 20 points may be recommended for approval. (California Code of Regulations Title 4, Division 13, Section 10033(c)(6).)

THE APPLICANT

Quartz & Silicon Materials Company Ltd (the “Applicant”), formed in Wyoming as a limited liability company in 2024, and maintains corporate headquarters in Phoenix, Arizona.

The Applicant aims to strengthen domestic renewable energy manufacturing by producing silicon wafers—an essential semiconductor component of photovoltaic solar cells—in the United States. Globally, more than 98 percent of solar wafers are produced in China. Domestic production will help mitigate supply chain vulnerabilities, support national clean energy deployment goals, and reduce reliance on overseas suppliers.

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

- Graphene and Solar Technologies Limited (100%)

The company officers of the Applicant are:

- Paul Saffron, Chief Executive Officer
- Tina Woo, Chief Financial Officer
- Paul Saffron, Corporate Secretary
- Jason May, Chairman and Director
- Paul Saffron, Director

THE PROJECT

Quartz & Silicon Materials Company Ltd requests a sales and use tax exclusion (“STE”) award to build a new silicon wafers manufacturing facility located in Chula Vista (the “Project”). The facility is designed to produce approximately 1.085 billion wafers annually, representing about 10 gigawatts of solar generation capacity. Each wafer delivers roughly 8.9 watts of peak power and is expected to generate approximately 13.7 kilowatt-hour per year once incorporated into a finished solar module. The wafers will be supplied to U.S.-based solar cell manufacturers and vertically integrated solar module producers.

To achieve this production capacity, the Project will install manufacturing systems to produce monocrystalline silicon wafers, including diamond wire saws, metal gluing systems, degumming and cleaning equipment, automation systems, gas and exhaust treatment units, grading and coating equipment, and chemical storage systems. These systems will support continuous 24-hour wafer slicing, cleaning, inspection, and packaging operations.

Anticipated Costs of Qualified Property

Anticipated Qualified Property Purchases		Cost
Metal Gluing Line and Inspection		$13,685,000
Diamond Wire Saw x 88		$58,305,000
Sawing Production Tools		$3,070,500
Degumming & Cleaning Tools		$20,125,000
Gas and Exhaust Units		$10,803,100
Automation Systems		$32,890,000
Grading, Coating, and Shipping		$30,590,000
Chemical Storage Tanks & Containment Systems		$7,000,000
	Total	**$176,468,600**

Note: The Qualified Property purchases reported in the Application and shown here in staff's report are estimated costs. In accordance with the Regulatory Agreement, a finalized Project equipment list will be prepared detailing the value of the Project equipment actually acquired, and the estimated tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance 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 over original estimates, and other reasons. In addition, those costs may vary after closing due to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in statute or regulation, or for other reasons.

Timeline

The Project is in an advanced planning stage, and the Applicant states it has already commenced Phase 1 activities. The Applicant has issued a detailed Request for Proposal (RFP) to the building owner and agreed to lease terms in principle, including an option to purchase the Facility site. The Applicant has engaged its general contractor and essential subcontractors—including structural engineers, plumbing, high-voltage electrical specialists, general electrical contractors, and solar-system installers—and reports that its in-house engineering team has advanced the manufacturing-line layout and outside-systems design, including water treatment, HVAC, and air-transfer requirements.

The Applicant further states that a nationally recognized architectural firm has completed the office-fit-out design across two floors and is leading the applications process with the City of Chula Vista and San Diego County. The Applicant has conducted multiple meetings with City representatives and confirmed that all procedural steps are being followed in accordance with the City's prescribed requirements.

The Applicant states that Phase 1 of the Project's formal approval process will begin in September 2026, which constitutes Month 1 of the Project's implementation schedule. Subsequent procurement, installation, logistics, and commissioning phases will follow the existing 12-month, four-phase schedule aligned with the Facility's placed-in-service date.

Status of Permits/Other Required Approvals
The Applicant states it has completed all preparatory steps required to begin the City of Chula Vista's permitting process. The Applicant reports that its Formal Preliminary Application Approval package is ready for submission and that Month 1 of the Project's permitting schedule will begin in September 2026, consistent with the Applicant's planned Phase 1 start.

The Applicant further reports that its high-voltage engineering and electrical-contracting teams have already initiated coordination with San Diego Gas & Electric (SDG&E), which is expected to represent the Project's longest and most technically involved permitting activity. Initial internal reviews have confirmed requirements relating to rooftop and carport solar systems, hazardous-materials use and storage (seven listed materials), and the design of the onsite wastewater-treatment plant, which will occupy approximately 5,000 square feet at the rear of the site.

Required approvals include:
- City of Chula Vista Use Permit
- Sweetwater Water District water-capacity and flow-rate certification
- Wastewater treatment and industrial discharge approvals
- Hazardous materials use and storage permits
- Electrical distribution and utility upgrades through SDG&E
- Rooftop and carport solar PV installation permits
- Site-safety and signage permits

According to the Applicant, these approvals will proceed concurrently with the City's formal application process. Permit submissions will occur during Months 1–2, with utility coordination and approvals anticipated by Month 3 of the Project's implementation schedule.

COMPETITIVE CRITERIA SCORE

The Applicant received 205 Competitive Criteria points as follows:

1. **Environmental Benefits (100 of 100 points).** The Application has a Project that produces an Alternative Source product, component, or system, and, therefore, 100 points are awarded.

2. **Unemployment (0 of 50 points).** The Applicant's Project is located in San Diego County, which has an average annual unemployment rate of 4.6%.[4] When compared to the statewide average annual unemployment rate of 5.5%, the Project location earned the Applicant zero points.

3. **Job Creation (30 of 75 points).** The Applicant anticipates the Project will support a total of 401 production-related jobs at its Facility. CAEATFA estimates that approximately 28 of these jobs will be attributable to a marginal increase in jobs

[4] Unemployment rates are based on data available in March 2026.

created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 30 points.

4. **California Headquarters (0 of 15 points)**. The Applicant does not have a California Corporate Headquarters, and, therefore, zero points are awarded.

5. **Natural Disaster Relief (0 of 50 points).** The Project is not to rebuild or relocate the Applicant's Facility due to a fire, flood, storm, or earthquake identified in a state of emergency proclaimed by the Governor within two years of the time of application, and, therefore, zero points are awarded.

6. **Eligibility for Manufacturing and Research and Development Equipment Exemption (0 of 50 points).** The Applicant is eligible to use one or more of the exemptions established pursuant to Section 6377.1 of the Revenue and Taxation Code, and, therefore, zero points are awarded.

7. **Emerging Strategic Industry (75 of 75 points).** The Project's industry, silicon wafers manufacturing, is in an Emerging Strategic Industry, and, therefore, 75 points are awarded.

PROJECT EVALUATION

Project Benefits
The Project received a Total Score of 1,804 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 276 points, which exceeds the 20-point threshold.

1. **Fiscal Benefits (1,403 points).** The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales and use taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes, and other indirect fiscal benefits of the Applicant. The total fiscal benefits amount to $21,042,994, resulting in a Fiscal Benefits score of 1,403.

2. **Environmental Benefits (276 points).** The Project is anticipated to result in $4,142,607 of total pollution benefits over the life of the Project, resulting in an Environmental Benefits Score of 276 points. These benefits derive from domestic wafer production, which significantly reduces the carbon intensity associated with photovoltaic solar components.

3. **Additional Benefits (125 points).** Applicants may earn "Additional Benefits" points in the categories listed below. The Applicant received 125 Additional Benefits points.

   A. **Production Jobs (30 of 75 points).** The Applicant anticipates the Project will support a total of 401 production-related jobs at its Facility. CAEATFA estimates that approximately 28 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 30 points.

B. Construction Jobs (0 of 75 points). The Applicant anticipates the Project will support a total of 141 construction jobs at its Facility. CAEATFA estimates that approximately 10 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned zero points.

C. Unemployment (0 of 50 points). The Applicant's Project is located in San Diego County, which has an average annual unemployment rate of 4.6%. When compared to the statewide average annual unemployment rate of 5.5%, the Project location earned the Applicant zero points.

D. Non-CA Environmental Benefits (5 of 40 points). The Applicant's total value of out-of-state non-greenhouse gas emissions pollution benefits are valued at $159,944.16 resulting in a Non-CA Environmental Benefits Score of five points for the Project.

E. Workforce Partnerships (25 of 25 points). The Applicant has a partnership with University of San Diego for the purpose of training the workers at the Facility and assisting in the training of potential future workers, including veterans.

F. Benefits and Fringe Benefits (25 of 25 points). The Applicant states it provides medical, health, dental and vision benefits, bonuses, retirement contributions, education reimbursement, and paid leave to its employees, earning the Applicant 25 points.

G. Emerging Strategic Industry (40 of 40 points). The Project's industry, silicon wafers manufacturing, is in an Emerging Strategic Industry, earning the Applicant 40 points.

LEGAL STATUS QUESTIONNAIRE

The Applicant indicated they had nothing to report for the questions contained in the Legal Status portion of the Application. Staff conducted a broad online search of publicly available sources, including SEC Form 10-K filings and OSHA records, as well as other relevant sources as appropriate, and did not find any matters affecting the financial viability or legal integrity of the Applicant.

CAEATFA FEES

In accordance with STE Program regulations,[5] the Applicant paid CAEATFA an Application Fee of $10,000 and will pay CAEATFA a total Administrative Fee of up to $350,000 should the Applicant be approved for an award. Upon execution of the Regulatory Agreement, the Applicant shall pay $175,000.

[5] California Code of Regulations Title 4, Division 13, Section 10036

RECOMMENDATION

Staff recommends the approval of Resolution No. 26-SM003-01 for Quartz & Silicon Materials Company Ltd's purchase of qualifying tangible personal property in an amount not to exceed $176,468,600 anticipated to result in an approximate STE value of $14,999,831. The initial term of the Regulatory Agreement will be for a period of five years, until September 15, 2031, and the full term shall be for a period of 12 years, until September 15, 2038, for providing annual compliance reports.

RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A REGULATORY AGREEMENT WITH QUARTZ & SILICON MATERIALS COMPANY LTD

September 15, 2026

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the "Authority") has received the Application of **Quartz & Silicon Materials Company Ltd** (the "Applicant") for financial assistance under the Sales and Use Tax Exclusion Program, as established in Public Resources Code Section 26011.8; and

WHEREAS, the Applicant qualifies as a Participating Party under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8; and

WHEREAS, the Applicant's qualifying tangible personal property meets the requirements of a Project under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8 (the "Project"); and

WHEREAS, after the Authority approves an Application, the Authority enters into a Regulatory Agreement, as described in Authority Regulations Section 10035(a), with the Applicant for the Project; and

WHEREAS, the Applicant has stated the Project has an estimated cost not to exceed $176,468,600 over a period of five (5) years; and

WHEREAS, the Applicant asserts 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 Project pursuant to Revenue and Taxation Code Section 6010.8; and

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

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

Section 1. The Regulatory Agreement includes a Project within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The Regulatory Agreement constitutes financial assistance within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a participating party within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The 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 that do not affect eligibility, provided that the amount of the qualifying tangible personal property to be purchased for the Project may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Regulatory Agreement between the Applicant and the Authority, as filed with the Authority prior to this public meeting, is hereby approved. For, on behalf and in the name of the Authority, the Authorized Signatories are hereby authorized and directed to execute, acknowledge, and deliver to the Applicant the Regulatory Agreement in substantially the form filed with or approved by the Authority.

The Regulatory Agreement may contain insertions, deletions or changes as the Authorized Signatories executing the Regulatory Agreement may require or approve, including particular information inserted in substantial conformance with the staff summary and in the Application to the Authority. The approval of the Regulatory Agreement will be conclusively evidenced by the execution and delivery of the final Regulatory Agreement.

The Authority understands and agrees that, pursuant to the terms of the Regulatory Agreement, the obligations of the Applicant, under some circumstances, may 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 to consummate the Regulatory Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall ensure that all of the qualifying tangible personal property acquired as part of the Project that is listed in the semi-annual reports provided to the Authority pursuant to the Regulatory Agreement will be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Regulatory Agreement shall only apply to qualifying tangible personal property acquired as part of the Project that the Applicant certifies will be installed, maintained and operated at facilities physically located within the State of California.

Section 9. Neither the adoption by the Authority of this Resolution for the Applicant nor the Regulatory Agreement may be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project and may not be referred to 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 is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty (30) days for up to an additional thirty (30) days, if necessary.