

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

Request to Approve Project for Sales and Use Tax Exclusion (STE)¹

**Sila Nanotechnologies
Application No. 14-SM065**

Tuesday, December 19, 2017

Prepared By: *Xee Moua, Program Analyst*

SUMMARY

Applicant – Sila Nanotechnologies, Inc.

Location – Alameda, Alameda County

Industry – Silicon-Based Anode Powder Manufacturing

Project – New Silicon-Based Anode Powder Manufacturing Facility (Advanced Manufacturing)

Value of Qualified Property – \$11,018,845

Estimated Sales and Use Tax Exclusion Amount² – \$927,787

Application Score –

| | |
|---------------------------------------|--------------|
| Fiscal Benefits Points: | 987 |
| <u>Environmental Benefits Points:</u> | <u>40</u> |
| Net Benefits Score: | 1,027 |

| | |
|------------------------------------|--------------|
| <u>Additional Benefits Points:</u> | <u>160</u> |
| Total Score: | 1,187 |

Staff Recommendation – Approval

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

² This amount is calculated based on the average statewide sales tax rate of 8.42%.

THE APPLICANT

Sila Nanotechnologies, Inc. (“Sila” or the “Applicant”), a Delaware corporation, was established in 2011 and is located in Alameda, California. The Applicant will be manufacturing silicon-based anode powder that will be distributed to businesses that specialize in lithium ion battery production. Sila’s represents its process will extend battery performance, reduce production costs and promote growth of electrical vehicle sales.

The Applicant has received \$3.6 million in grants from the U.S. Department of Energy (“DOE”) Advanced Research Programs Agency- Energy and \$1 million from the U.S. DOE Energy Efficiency and Renewable Energy Program. Sila was also approved for a tax credit of \$1.5 million under the California Competes Tax Credit Program.

The major shareholders (10.0% or greater) of Sila Nanotechnologies, Inc. are:
Sutter Hill Venture Entities
Matrix Partners Entities
Bessemer Venture Partners Entities
Chengwei Ventures Sila Holdings Limited

The corporate officers of Sila Nanotechnologies, Inc. are:
Mike Speiser, Director
Byron Deeter, Director
Andy Verhalen, Director
Steve Walske, Director
Gleb Yushin, Chief Science Officer
Gene Berdichevsky, President and Chief Executive Officer

THE PROJECT

Sila is applying for a sales and use tax exclusion to construct a manufacturing facility in Alameda that will produce silicon-based anode powder (the “Project”). The Applicant represents that the Project will use cutting-edge technology and advanced materials to manufacture silicon-based anode powder, which is anticipated to replace the battery industry standard graphite-based powder.

According to the Applicant, the Project will utilize proprietary software, advanced automated tools, and intelligent operating systems that will be able to monitor production wastes, materials and energy consumption in order to increase the Project’s environmental sustainability and performance. The Applicant represents that through the utilization of these technological innovations, approximately 20% less electricity will be consumed per unit output compared to industry standard. For example, according to Sila, the industry standard graphite-based powder uses a process called graphitization, which requires a furnace to operate at 3,000 degrees Celsius for effective removal of material impurities in graphite. Sila represents that the Project requires half the maximum furnace temperature.

The Applicant also represents that the Project will utilize advanced materials, such as proprietary powders. According to Sila, the Project will produce anode powder that will increase battery density by approximately 20% compared to industry standard.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

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The anticipated Qualified Property purchases are listed below:

| | |
|------------------------------------------------|----------------------------|
| Mechanical Processing Tools | \$ 2,454,837 |
| Inverted Filter Centrifuge | 650,000 |
| Furnaces and Gas Boxes | 3,023,870 |
| Process Hardware and Control Panels | 2,269,649 |
| Multiprocessing Tools and Peripheral Furniture | 856,489 |
| Facilities Storage/Tanks/Generators | 1,499,000 |
| Construction Materials | 265,000 |
| Total | <u>\$11,018,845</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 master regulatory agreement a finalized project equipment list will be prepared detailing the value of the Project equipment acquired and detailing the actual 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, 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

The Applicant represents construction began in October 2017 and will end December 2017. Hiring and installation of systems and tools will take place January 2018 through May 2018. The Applicant predicts production will begin June 2018.

PROJECT EVALUATION

NET BENEFITS

The Project received a Total Score of 1,187 points, which exceeds the required 1,000 point threshold, and a total Environmental Benefits Score of 40 points, which exceeds the 20 point threshold.

- A. Fiscal Benefits (987 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 \$916,086 resulting in a Fiscal Benefits score of 987 points for the Project.

- B. Environmental Benefits (40 points).** The Project will result in an Environmental Benefits Score of 40. The Applicant received points in the following categories:

1. **Environmental Sustainability Plan (20 of 20 points)**. The Applicant will implement an environmental sustainability for its Project that it represents will result in decreased energy consumption for manufacturing silicon-based anode powder.
 2. **Energy Consumption (20 of 30 points)**. The Applicant represents that its manufacturing process will result in a 20% reduction in energy consumption relative to the industry standard manufacturing process.
- C. **Additional Benefits (160 points)**. Applicants may earn additional points for their Total Score. The Applicant submitted information and received 160 additional points.
1. **Permanent Jobs (55 of 75 points)**. The Applicant represents that the Project will support a total of 103 permanent jobs at its Facility. CAEATFA estimates that approximately eight of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Permanent Jobs Score of 55 points for the Project.
 2. **Construction Jobs (30 of 75 points)**. The Applicant represents that the Project will support a total of 20 construction jobs at its Facility. CAEATFA estimates that approximately two of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Construction Jobs Score of 30 points for the Project.
 3. **Research and Development Facilities (25 points)**. The Applicant has verified that it has a facility located in California that performs research and development functions related to lithium ion battery component research, development, and process improvements.
 4. **Workforce Partnerships (25 points)**. The Applicant has a partnership with Georgia Tech University, Waterloo University, and Northern University for the purposes of assisting in the training of potential future workers.
 5. **Industry Cluster (25 points)**. The industry associated with this Application has been identified as an industry cluster of the region of the Project's location.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

The Applicant represents that a Conditional Use has been approved by the City of Alameda as of 2014 and its Air Emissions Permit with the Bay Area Air Quality Management District (BAAQM) is current. A Construction Permit was sent to the City of Alameda in November 2017 and a Wastewater Discharge Permit application was submitted to the East Bay Municipal District

October 2017. The applicant anticipates obtaining all required permits in time to begin production in June 2018.

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 has paid CAEATFA an Application Fee of \$5509.42 and will pay CAEATFA an Administrative Fee of up to \$44,075.38.

RECOMMENDATION

Staff recommends approval of Resolution No. 17-SM065 for Sila Nanotechnologies, Inc.'s purchase of Qualified Property in an amount not to exceed \$11,018,845 anticipated to result in an approximate Sales and Use Tax Exclusion value of \$927,787.

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

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER
REGULATORY AGREEMENT WITH SILA NANOTECHNOLOGIES, INC.**

December 19, 2017

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Sila Nanotechnologies, Inc.** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized in an Advanced Manufacturing process or 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 to acquire Project equipment with an estimated cost not to exceed \$11,018,845 over a period of three years; 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(a)(8)(B).

Section 2. The requested master 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, 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.

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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 listed in the semi-annual reports 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.