

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

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

**Quantitative BioSciences, Inc.
Application No. 19-SM011**

Tuesday, May 21, 2019

Prepared By: *Matthew Parsons, Program Analyst*

SUMMARY

Applicant – Quantitative BioSciences, Inc.

Location – Modesto, Stanislaus County

Industry – Biogas Capture and Production

Project – New Biofuel Production Facility (Alternative Source)

Value of Qualified Property – \$875,511

Estimated Sales and Use Tax Exclusion Amount² – \$73,193

Estimated Quantifiable Net Benefits – \$38,079

Application Score –

Fiscal Benefits Points:	1,280
<u>Environmental Benefits Points:</u>	<u>240</u>
Net Benefits Score:	1,520

<u>Additional Benefits Points:</u>	<u>110</u>
Total Score:	1,630

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 8.36%.

THE APPLICANT

Quantitative BioSciences, Inc. (“QBI” or the “Applicant”), a California corporation headquartered in San Diego, was formed in May of 2010. QBI is a biotech company that focuses on projects related to renewable energy, wastewater remediation, and developing biosensors for determining water quality.

The major shareholders (10.0% or greater) of Quantitative BioSciences, Inc. are:

- Natalie Cookson (20%)
- Michael Ferry (20%)
- Jeff Hasty (20%)
- Scott Cookson (20%)
- Bud Marx (10%)
- William Mather (10%)

The corporate officers of Quantitative BioSciences, Inc. are:

- Jeff Hasty, Founder
- Natalie Cookson, President and CEO
- Mike Ferry, CSO
- Scott Cookson, COO

THE PROJECT

QBI is requesting a sales and use tax exclusion to build a new biofuel production facility located in Modesto (the “Project”). QBI has partnered with family owned and operated Fiscalini Dairy (“FD”) to construct an algae-based waste treatment plant that uses biogas from FD’s anaerobic digesters to produce fuel-quality biomethane for vehicle use, generate high-protein algae feed for livestock, and remediate water for improved crop irrigation.

According to QBI, it is installing a membrane-based biogas refinement system, which purifies biogas into vehicle quality biomethane. The Applicant states that the yield from the system will be approximately 164,000 diesel gallon equivalents annually, and will be used in transportation applications exclusively in order to harness the economic benefits of the Renewable Fuel Standard and the Low Carbon Fuel Source credits.

According to QBI, the Project provides additional environmental and financial benefits due to the use of algae raceway ponds that sequester the carbon dioxide stream from the refinement process and integrate the gas, along with the high level of nutrients in the digester effluent wastewater, into a high protein feed for the farm’s cows. According to the Applicant, the ponds will also be used to grow and harvest algae that not only helps sequester the carbon dioxide that would otherwise be emitted and improves water quality, but also helps offset the farm’s large expense of purchasing animal feed. QBI claims that the various benefits of the Project contribute to a fuel with an extremely low carbon intensity that will be highly beneficial and will provide a template for similar projects throughout the state.

QBI was awarded a \$2,000,000 grant for the Project from the California Energy Commission.

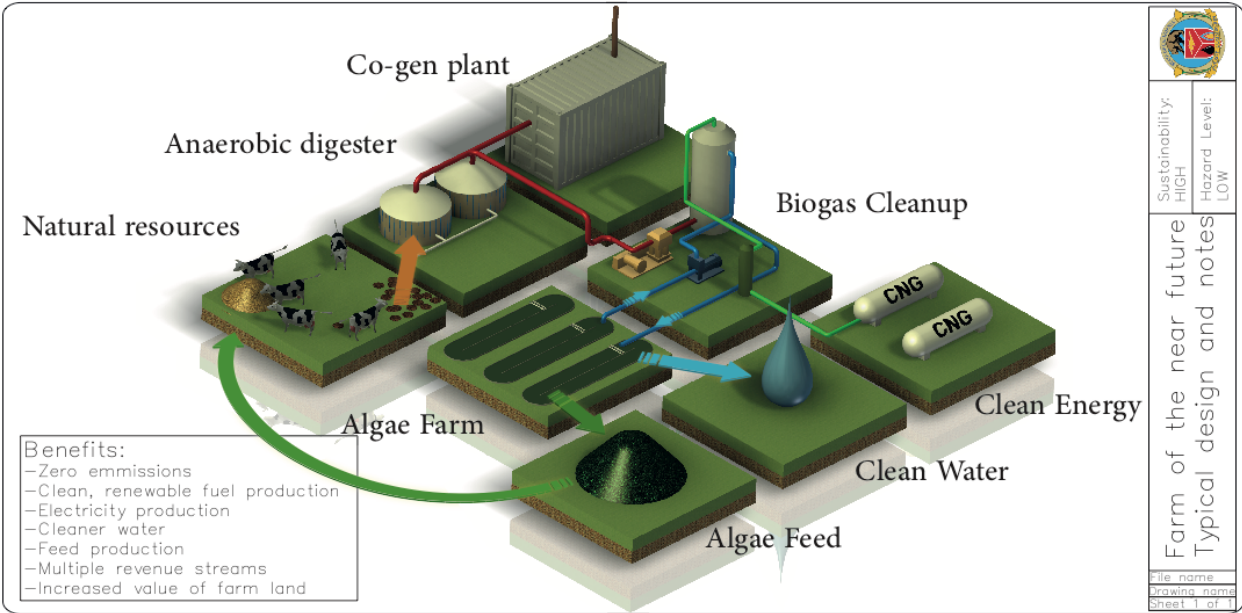


Figure 1: QBI’s facility will convert dairy cow waste to energy, livestock feed, and clean water.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Quantum VP6 Compressed Natural Gas Trailers	\$220,000
Sauer Compressed Natural Gas Compressor	149,031
Air Compressor	5,300
Air Liquide Biogas Skid	441,000
Flow Meter	11,650
Correiolus Flow Meter	8,010
Fill Post	7,000
Gas Analyzer	<u>33,520</u>
Total	<u>\$875,511</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

According to the Applicant, the biogas purification unit is complete and will arrive in June of 2019, and the integration construction is anticipated to be completed in July of 2019. QBI states that the algae seed ponds are already installed and operational, and the construction of its two and one-half acre ponds began in April of 2019 and will be fully operational in May of 2019. QBI states that full scale production and sale of the biofuel will begin in August of 2019.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$875,511 and the total quantifiable net benefits are valued at \$38,079 for the Project. The Project received a Total Score of 1,630 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 240 points, which exceeds the 20-point threshold.

- A. Fiscal Benefits (1,280 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 \$93,692, resulting in a Fiscal Benefits score of 1,280 points for the Project.

- B. Environmental Benefits (240 points).** The Project will result in \$17,580 of total pollution benefits over the life of the Project, resulting in an Environmental Benefits Score of 240 points for the Project. These benefits derive from the production of dairy biogas, which offsets the need for use of fossil methane.

- C. Additional Benefits (110 points).** Applicants may earn additional points for their Total Score. The Applicant submitted information and received 110 additional points.
 - 1. Production Jobs (30 of 75 points).** The Applicant represents that the Project will support a total of one production-related job at its Facility. CAEATFA estimates that approximately one job will be attributable to a marginal increase in jobs created due to the approved STE.

 - 2. Construction Jobs (30 of 75 points).** The Applicant represents that the Project will support a total of one construction job at its Facility. CAEATFA estimates that approximately one job will be attributable to a marginal increase in jobs created due to the approved STE.

 - 3. Unemployment (50 of 50 points).** The Applicant's Project is located in Stanislaus County which has an average annual unemployment rate of 8%. This is above 110% of the statewide average annual unemployment rate which

was 5.1% in 2017, the dataset used in the application. This results in an Unemployment Score of 50 points for this Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

According to the Applicant, it is in the process of and anticipates obtaining an Air Permit from the San Joaquin Valley Air Pollution Control District in May of 2019, as well as an “Approval to Construct” authorization from the Regional Water Quality Control Board, Central Valley Region, in July of 2019.

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 \$437.76 and will pay CAEATFA an Administrative Fee of \$15,000.

RECOMMENDATION

Staff recommends approval of Resolution No. 19-SM011 for Quantitative BioSciences, Inc.’s purchase of Qualified Property in an amount not to exceed \$875,511, anticipated to result in an approximate sales and use tax exclusion value of \$73,193.

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

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER
REGULATORY AGREEMENT WITH QUANTITATIVE BIOSCIENCES, INC.**

May 21, 2019

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Quantitative BioSciences, 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 \$875,511 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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Application No. 19-SM011

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.