

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

*Consideration of Oberon Fuels Inc.’s Request to Approve a Time Extension for the Three
Year Initial Term of the Title Conveyance Agreement*

**Oberon Fuels, Inc.
Resolution No. 12-SM013**

Tuesday, October 20, 2015

Prepared By: *James Shimp, Analyst*

Applicant – Oberon Fuels, Inc.

Location – Brawley, Imperial County

Industry – Biogas Capture and BioDME (dimethyl ether) Production

Project – New Biogas Capture and BioDME Production Facility

Value of Qualified Property – \$13,500,000

Estimated Sales and Use Tax Exclusion Amount¹ – \$1,136,700

Amount of Time Requested:

- Two years (24 months) for the Term of the Title Conveyance Agreement (five years from the date of initial CAEATFA Board approval)

SUMMARY

In November 2012, the CAEATFA Board approved a sales and use tax exclusion (“STE”) for Oberon Fuels, Inc. (“Oberon” or “Applicant”) for the purchase of \$13,500,000 of Qualified Property for the construction of a new biogas capture and bioDME (diethyl ether) production facility (the “Project”). The Master Regulatory and Title Conveyance Agreement (“Agreement”) initial term provided the Applicant with three years from the date of Board Approval to utilize its STE award. The initial term of the Agreement can be extended by the Board upon a finding that an extension is in the public interest and advances the purposes of the Program.²

As of October 1, 2015, Oberon has conveyed \$568,195.71 of Qualified Property. In August 2015, CAEATFA staff sent the Applicant a courtesy reminder of the end of the three year initial term. Oberon responded by requesting an extension of the Agreement initial term by two years (24 months) to accommodate an unanticipated delay in the commercial production of bioDME-

¹ This amount is calculated based upon the average statewide sales tax rate of 8.42%.

² Regulation Section 10035(b)(1)(A)

fueled vehicles. The Applicant states that the Project is being undertaken in a phased approach. Phase I involves the infrastructure necessary to convert methanol to fuel grade DME. This portion of the project is already in place, and has provided fuel for field tests of Volvo trucks running on DME. Phase II of the Project will install equipment to capture and produce methanol from manure, completing the chain from input to final product. The second phase was set to coincide with commercial production of bioDME-fueled vehicles in the California market, which was delayed and is now anticipated to occur within the next three years. In addition to Volvo's field tests, several other manufacturers have started development of bioDME engines, including Ford of Europe, which announced a three year project to bring such technology to the US.

About the Applicant

Oberon Fuels, Inc. was established in November 2010 in Delaware and is based in San Diego, California. Oberon is a development company that designs, builds and operates facilities that convert biogas from domestic feedstock, such as cow manure, wastewater treatment facilities, or landfills, into bioDME, a diesel fuel alternative. Oberon is focused on increasing the use of bioDME in North America as a diesel fuel alternative for the truck, agricultural and construction markets.

Project Description

Oberon has been in the process of constructing a facility that will produce approximately 4,500 gallons of bioDME from biogas captured and produced from cow manure or other organic waste sources. Oberon claims that the small scale nature of its design enables it to mitigate the financial, infrastructure, and permitting challenges of large-scale projects. The Applicant was established in 2010, and its first location is in Imperial Valley. As the market develops, Oberon anticipates construction of additional facilities.

The process of creating bioDME begins by collecting biogas from cow manure using anaerobic digester units. The biogas then passes along to steam methane reforming units and methanol production units, which, along with the intermediary syngas, convert biogas into methanol. The methanol is then converted into bioDME in processing units, thereby completing the final alternative source fuel product. Oberon has divided Project development into two phases. Phase I put in place equipment that converts methanol to bioDME. Phase II will incorporate the remainder of the equipment for capturing and processing methanol from manure.

Over the past four years, Oberon has been working in partnership with Volvo on the commercial launch of Volvo bioDME trucks in North America. Phase I of the Project has tested equipment and provided fuel for Volvo's heavy-duty truck demonstration in North America. Estimates on commercial production of bioDME-fueled vehicles have caused Oberon to delay capital outlays for Phase II until the two can be coordinated, which is estimated to occur within the next few years.

Agreement Term Extension Request

Oberon has requested that the initial term of the Agreement be extended from November 13, 2015 to November 13, 2017 to accommodate an unanticipated delay in the commercial production of bioDME-fueled vehicles. This will allow the Applicant to coordinate their full scale production with the commercial availability of bioDME-fueled vehicles.

Staff Evaluation

Oberon has indicated that their Project is progressing, that bioDME-fueled vehicles are anticipated on the market in the near future, and that the Project will be completed as outlined in the original application. Delays to the purchasing timeline reflect the Applicant's need to ramp fuel production in tandem with demand for the new vehicles. Based on this information, staff believes that extending the term of the Agreement will allow for the Project to continue, and is therefore in the public interest and advances the purpose of the program.

Staff Recommendation

Staff recommends that the Board approve Oberon's request to extend the initial term of the Agreement by two years (24 months) to November 13, 2017 as it is in the public interest and advances the purpose of the program.

Attachments

- Attachment A: Oberon Fuels, Inc.'s Letter Requesting Waiver (September 22, 2015)
- Attachment B: Oberon Fuels, Inc. Staff Summary at Time of Approval

**A RESOLUTION OF THE
CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION
FINANCING AUTHORITY APPROVING A TIME EXTENSION FOR
OBERON FUELS, INC.'S INITIAL TERM FOR THE MASTER REGULATORY AND
TITLE CONVEYANCE AGREEMENT**

October 20, 2015

WHEREAS, on November 13, 2012 the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”), a public instrumentality of the State of California, approved a Sales Tax Exclusion (“STE”) in the amount of \$13,500,000 of Qualified Property for **Oberon Fuels, Inc.** (the “Applicant”); and

WHEREAS, within three years of the approval by the Authority, the Applicant must make all purchases of the total amount of Qualified Property listed in the approval resolution (Regulations Section 10035(b)(1));

WHEREAS, upon a finding that it is in the public interest and advances the purposes of the Program, the Authority may waive the requirement that all purchases of Qualified Property be made within three years of Application approval (Regulations Section 10035(b)(1)(A));

WHEREAS, the Applicant has requested a waiver of the requirement to purchase all of the Qualified Property within three years, due to the need to coordinate production with bioDME-fueled vehicle production, and requests extension of the term from November 13, 2015 to November 13, 2017; and

WHEREAS, granting the waiver will allow the Project to proceed and the state to receive the anticipated environmental and economic benefits that justified the initial approval of the Project in accordance with the law, thereby advancing both the public interest and the purposes of the Program.

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

Section 1. The Authority finds that it is in the public interest and advances the purposes of the Authority to extend the initial term of the Agreement to November 13, 2017.

Section 2. This resolution shall take effect immediately upon its passage.

Attachment A: Oberon Fuels, Inc.'s Letter Requesting Waiver (September 22, 2015)

September 22, 2015

Ms. Deana J. Carrillo
Executive Director
CAEATFA
915 Capitol Mall, Room 457
Sacramento, CA 95814

Re: Oberon Fuels, Inc. - SB-71 Sales and Use Tax Exclusion Program - Request for Time Extension of Purchase Requirement

Dear Ms. Carrillo,

Oberon Fuels is requesting a time extension for the Purchase Requirement of our SB-71 Alternative Source and Advanced Transportation Manufacturing Sales and Use Tax Exclusion Program, for the facility located at 5451 Kershaw Road, Calipatria, CA 92233.

Oberon Fuels requests a time extension of 24 months, expiring on November 13, 2017, which will allow enough time to purchase and convey the remaining Qualified Property.

The extension is necessary because we still need to purchase remaining Qualified Property to complete the construction of Phase 2 at the DME plant. This phase will provide the biogas to methanol steps in the DME production process. DME is a clean-burning alternative fuel that provides the same efficiency and power of diesel without generating any particulate matter in the engine.

Phase 1 of the project covered the conversion of methanol to fuel grade DME. It was completed in the summer of 2013 and DME fuel from the plant has been used since to provide fuel for field tests of Volvo class 8 trucks running on DME in the US. The plant is the only source of fuel-grade DME in North America and has been a catalyst for the adoption of the new fuel in the marketplace. Over the course of this project, ASTM and ISO have released specifications for DME fuel, the EPA has approved a pathway for bioDME to earn RINS credits, CARB has initiated the certification of DME fuel, and the CDFA approved a rule change to allow for the legal sale of DME as a fuel. In addition to Volvo, other vehicle manufacturers have started development work on DME fueled engines. Most recently, Ford of Europe announced a 3-year project to develop a DME powered passenger car. The project will utilize DME fuel produced at Oberon's plant in California.

Phase 2 of Oberon's DME plant is being timed to coincide with the release of commercially available production vehicles into the California market. Based on current development timelines, Oberon plant Phase 2 will be completed with a target



of producing bioDME by Q1 of 2018.

Thank you for your continued support of the Oberon DME plant in California. This project is a critical component in the process of bringing clean-burning DME fuel to California and the global market. Please contact me if you have any questions at 619-255-9361 or elliott@oberonfuels.com.

All the best,



Elliot Hicks
Chief Operating Officer

Attachment B: Oberon Fuels Inc. Staff Summary at Time of Approval

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

*Request to Approve Project for SB 71 Sales and Use Tax Exclusion (STE)*³

**Oberon Fuels, Inc.
Application No. 12-SM013**

November 13, 2012

Prepared By: *Alejandro Ruiz*

SUMMARY

Applicant – Oberon Fuels, Inc.

Location – Brawley (Imperial County)

Industry – Biogas Capture & bioDME (dimethyl ether) Production

Project – New Biogas Capture and bioDME Production Facility

Value of Qualified Property – \$13,500,000

Estimated Sales and Use Tax Exclusion Amount⁴ – \$1,093,500

Estimated Net Benefits – \$9,561

Application Score⁵ –

Fiscal Benefits Points:	621
<u>Environmental Benefits Points:</u>	<u>388</u>
Net Benefits Score:	1,009
<u>Additional Benefits Points:</u>	<u>40</u>
Total Score:	1,049

Staff Recommendation – Approval

³ All capitalized terms not defined in this document are defined in the Program’s statute and regulations.

⁴ This amount is calculated based on the average statewide sales tax rate of 9.1%.

⁵ Point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

THE APPLICANT

Oberon Fuels, Inc. (“Oberon” or “Applicant”) was established in November 2010 in Delaware and is based in La Jolla, California. Oberon is a development company that designs, builds and operates facilities that convert biogas from domestic feedstocks, such as cow manure, wastewater treatment facilities, or landfills, into bioDME, a diesel fuel alternative. Oberon is focused on increasing the use of bioDME in North America as a diesel fuel alternative for the truck, agricultural and construction markets.

The major shareholders (10.0% or greater) of Oberon Fuels, Inc. are:
Martin Product Sales, LLC
Neil Senturia

The corporate officers of Oberon Fuels, Inc. are:
Neil Senturia – CEO
Rebecca Boudreaux – President
Elliot Hicks – COO, Secretary

THE PROJECT

Oberon plans to construct a facility that uses a small-scale process to produce approximately 4,500 gallons of bioDME from biogas obtained from cow manure. Oberon claims that the small-scale nature of its design enables it to mitigate the financial, infrastructure, and permitting challenges of large-scale projects. Founded two years ago, Oberon is building its first project in Imperial Valley, and anticipates it will construct and manufacture additional units as the market develops.

Over the past year, Oberon has been working in partnership with Volvo Truck on the commercial launch of Volvo bioDME trucks in North America. Oberon represents that this first Project will provide fuel for its heavy-duty truck demonstration in North America.

In addition, Oberon has been working with the California Air Resources Board and the California Department of Food and Agriculture Division of Measurement and Standards to determine the alternative fuel certification pathway for bioDME.

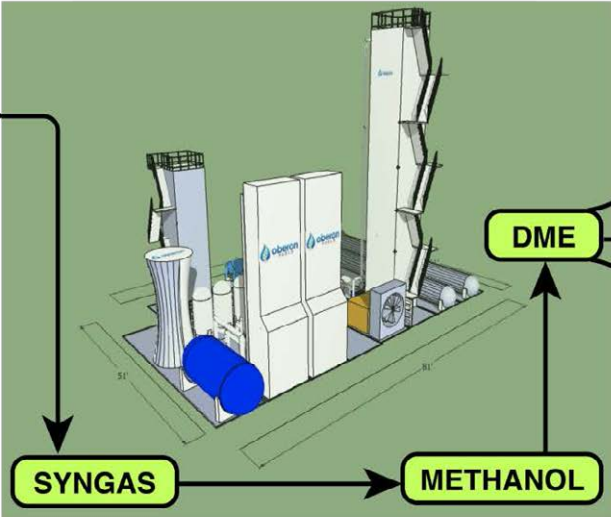
The process will begin by collecting biogas from cow manure using the Anaerobic Digester units. The biogas will then be passed along to the Steam Methane Reforming Units and Phase 2 Methanol Production Units, which, along with the intermediary syngas, will convert biogas into methanol. The methanol will then be converted into bioDME through the Processing Units – the final alternative source fuel product.

Phase 1 of the process will last approximately six weeks and will test the equipment that converts the methanol to bioDME. Phase 2 will incorporate the remainder of the equipment which will convert the biogas into the bioDME.

Oberon’s Small-Scale Process to Produce bioDME from Methane and Carbon Dioxide
Small-Scale OBERON Production Unit



Biogas
 Contains both methane and carbon dioxide, which are both used in the Oberon process



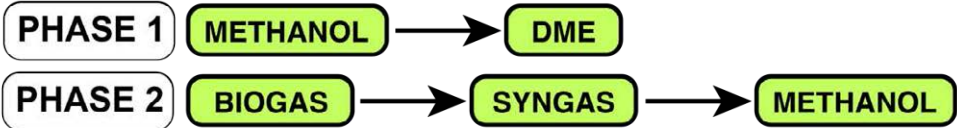
Agriculture



Transportation



Construction



ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Process Units – Phase 1 and Phase 2	\$ 2,379,985
Methanol Production Units – Phase 2	5,772,532
Steam Methane Reforming Units – Phase 2	2,284,583
Anaerobic Digester Units (package digester) – Phase 2	3,062,900
Total	<u>\$13,500,000</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

The Project will be completed in two separate phases. Phase 1 will include a majority of the site preparation work required for both Phases 1 and 2, which began in October 2012. The Phase 1 plant will be operated for approximately six weeks using purchased methanol to create bioDME as part of a demonstration project in partnership with Volvo. Phase 2 of the plant will begin at the end of 2013 when all equipment necessary to process cow manure is installed and operational. By the first quarter of 2014, the plant will be fully operational, producing 4,500 gallons of bioDME per day.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$13,500,000 and the total net benefits are valued at \$9,561 for the Project. The Project received a Total Score of 1,049 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 388 points, which exceeds the 100 point threshold.

- A. Fiscal Benefits (621 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 \$679,196 resulting in a Fiscal Benefits score of 621 points for the Project.

- B. Environmental Benefits (388 points).** The Project will result in \$423,866 of total pollution benefits over the life of the Facility resulting in an Environmental Benefits Score of 388 points for the Project. These benefits derive from (a) the production of bioDME, which offsets the need for use of diesel derived from fossil fuels and (b) the capture of methane from cow manure that would otherwise be released into the atmosphere.

- 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 15 permanent jobs at its Facility. CAEATFA estimates that approximately 3 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 2 construction jobs at its Facility. CAEATFA estimates that none 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.

3. **Unemployment (40 of 40 points)**. The Applicant's Project is located in Imperial County which has an unemployment rate of 30%. This is above 110% of the statewide unemployment average which is currently 12.4% resulting in an Unemployment Score of 40 points for this Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

Oberon is currently in the process of obtaining a conditional use permit subject to CEQA regulations. Oberon anticipates that it will receive a negative declaration or mitigated negative declaration before 2013. All construction permits will be obtained by the end of January 2013. Building permits will be acquired just before the applicable construction work begins. Lastly, a permit to operate from the Imperial County Air Pollution Control District will be required before plant operation begins and will be acquired shortly after the CEQA air study is completed.

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,⁶ the Applicant has paid CAEATFA an Application Fee of \$9,046.94 and will pay CAEATFA an Administrative Fee up to \$54,000.

RECOMMENDATION

Staff recommends approval of Resolution No. 12-SM013 for Oberon Fuels, Inc.'s purchase of Qualified Property in an amount not to exceed \$13,500,000 anticipated to result in an approximate sales and use tax exclusion value of \$1,093,500.

⁶ California Code of Regulations Title 4, Division 13, Section 10036

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A TITLE
CONVEYANCE AGREEMENT WITH THE OBERON FUELS, INC.**

November 13, 2012

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Oberon Fuels, 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 \$13,500,000 over a period of 3 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
Application No. 12-SM013

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.