Dockot Number	17 IEDD 01
Docket Number.	17-1EF K-01
Project Title:	General/Scope
TN #:	221742
Document Title:	Oberton Fuels Comments Expand Chapter 9 Renewable Gas Other Fuel Pathways
Description:	N/A
Filer:	System
Organization:	Oberon Fuels
Submitter Role:	Public
Submission Date:	11/13/2017 3:34:54 PM
Docketed Date:	11/13/2017

Comment Received From: Michael Coates Submitted On: 11/13/2017 Docket Number: 17-IEPR-01

Expand Chapter 9: Renewable Gas "Other Fuel Pathways"

Text attached.

Additional submitted attachment is included below.



2159 India Street, Suite 200 San Diego, CA 92101 (619) 255-9361

November 10, 2017

Docket No. 17-IEPR-10 [Renewable Gas]

Expanding DME fuel pathway discussion

Re: IEPR, page 289

Other Fuel Pathways

Biomethane can also be upgraded into renewable dimethyl ether (DME). DME is a clean-burning fuel with no particulates formation, is suitable for compression ignition engines with modifications, and handles similar to propane, enabling it to rely on existing propane infrastructure. DME has been used for decades as an energy source in other countries, but is only now being tested in the United States.

Thank you to the staffs of CEC, CARB, CPUC and other agencies for your work on the 2017 IEPR draft. We appreciate the inclusion of DME as a renewable gas in the section referenced above. We believe this is an important step as California looks to expand the commercial development and use of renewable gas. We believe the discussion should be expanded to include the following language:

As noted in the IEPR, "the (natural gas vehicle) market is constrained by a limited number of models and production volume" As Dr. Amy Jaffe is quoted on page 271: "The trucking industry has, to date, been mostly reluctant to take the plunge on expensive equipment upgrades to natural gas."

On the following page the extent of market penetration is shown as 1% of the 1.5 million mediumand heavy-duty vehicle market, in spite of generous government incentives.

On page 275, the IEPR notes part of the restrictive economics of renewable gas is the "costly and lengthy process" of pipeline interconnection.

The use of dimethyl ether (DME) from biomethane addresses these issues by avoiding the need for pipeline interconnection and expanding the potential market for the transportation to the other 90+% of the MDHD market that uses compression ignition engines.

Based on calculations from Lifecycle Associates, DME produced from renewable feedstocks by the Oberon Fuels process is carbon-negative. Estimates of DME carbon intensity values range from -237 CI for dairy gas to -5 CI for food and yard waste.

DME allows for local feedstocks, local production, and local consumption. This is consistent with the SB 1382 requirement of the Energy Commission to "identify cost-effective strategies that are consistent with existing state policies and climate change goals by considering priority end uses of renewable gas."

Oberon believes the use of renewable gas for DME is consistent with those goals, producing a fuel that operates in a truck with diesel-like costs, maintenance and road performance, with better tailpipe emissions characteristics.

This is a near-term pathway to introducing renewable gas into the medium- and heavy-duty transportation market.

Respectfully submitted,

Rebecca Boudreaux

Rebecca Boudreaux, Ph.D. President, Oberon Fuels