

DOCKETED

Docket Number:	18-ALT-01
Project Title:	2019-2020 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program
TN #:	227164
Document Title:	Re docket 18-ALT-01; CEC ARFVTP 2019-2020 Investment Plan comments
Description:	N/A
Filer:	System
Organization:	Rebecca Boudreaux
Submitter Role:	Public
Submission Date:	2/25/2019 9:12:49 AM
Docketed Date:	2/25/2019

Comment Received From: Rebecca Boudreaux
Submitted On: 2/25/2019
Docket Number: 18-ALT-01

Re: docket 18-ALT-01; CEC ARFVTP 2019-2020 Investment Plan comments

Date: Feb. 22, 2019

To: California Energy Commission

From: Oberon Fuels

Re: docket 18-ALT-01; CEC ARFVTP 2019-2020 Investment Plan comments

Note: Please accept these comments from Oberon Fuels, a California-based producer of ultra-low-carbon dimethyl ether (DME) fuel.

P.5

“Similarly, the federal Renewable Fuel Standard provides a direct incentive for the introduction of biofuels. Both complement ARFVTP investments by creating market incentives for near-term GHG reductions and alternative fuel use, allowing the ARFVTP to focus more resources on longer-term market transformation goals.”

COMMENT: This fails to take into account the challenge of developing new ultra-low-carbon fuels and taking them from the lab-scale stage to commercialization, where the LCFS can support them in the marketplace. We believe the CEC should dedicate funds to the development of ultra-low-carbon fuels in order to support GHG and criteria emissions reductions in existing fleets. While transformation of fleets to zero emission technology is important, reduction of the carbon footprint of the incumbent fleet remains critical as well. Some current biofuels provide some reductions, but the state should continue to promote development of innovative fuels that can significantly reduce emissions in vehicles on the road now.

In addition, in support of the state’s goal of transforming to zero emission technology, the CEC should also fund ongoing research into innovative approaches to zero-emission fuels such as renewable hydrogen, rather than simply perpetuating and expanding existing technologies that are not providing cost-effective solutions to zero emission vehicle infrastructure.

P.6

“The 2019-2020 Investment Plan Update builds on the analyses and recommendations contained in previously adopted investment plan updates. Past projects also provide direct feedback on how the ARFVTP can maximize value in supporting the transformation of the California transportation sector toward fuels and technologies that can meet the more aggressive emission reductions required by 2030 and 2050.”

COMMENT: California cannot rely only on transformative technologies to reach its ambitious 2030 and 2050 GHG reduction goals. It must move the needle with the vehicles that dominate the marketplace today and for decades to come, as well as supporting newer powertrain technologies that will one day dominate the marketplace.

P.69

“The California transportation sector depends largely on petroleum, which accounts for 89 percent of ground transportation fuel used in the state. Any low-carbon substitute fuel that can displace the roughly 14 billion gallons of petroleum-based gasoline and 3.3 billion gallons of petroleum-based diesel used per year in California can provide an immediate and long-term opportunity to reduce GHG emissions and petroleum use.

“Maximizing renewable fuel production from the lowest carbon pathways represents a key opportunity to reduce near-term GHG emissions in combustion engines and fuel cell electric vehicles. Biofuels derived from waste-based feedstocks typically have the lowest carbon intensity of all transportation fuels.”

COMMENT: In this section, CEC provides the rationale for our argument above. The fuels for the 89% of vehicles on the road need to be dramatically reduced in carbon content. Development and commercialization of those fuels should be one of the primary goals of the ARFVTP.

In this section the discussion of biomethane addresses only one pathway for its use as a transportation fuel “natural gas, while acknowledging, on P.72, that:

“For gaseous fuels, such as biomethane, producers may have difficulty finding purchasers for the fuel, as biomethane cannot be economically transported by truck or rail, and the complexities and regulations associated with pipeline injection often make this option uneconomical for all but the largest projects. Most often, biomethane fuel must be distributed to vehicles at or very near the site of production, which can limit the potential of this fuel, especially in rural areas that lack infrastructure and existing natural gas vehicle fleets.”

COMMENT: Given the significance of capturing biomethane to reduce GHG, the CEC should be dedicating resources to alternative paths for the use of biomethane as a source for other renewable biofuels. CEC recently funded a demonstration project to show the pathway from biomethane to renewable dimethyl ether (rDME), a low-carbon diesel substitute and H₂ carrier. Further development of this near-commercial technology could lead to a new pathway from biomethane to renewable hydrogen (rH₂).

P.75

“Upcoming solicitations may continue to use the combined category approach when scoring applications to maximize cost-effectiveness per dollar of state funding.”

COMMENT: The CEC should be careful in how it applies the cost-effectiveness metric. Demonstration projects showing new pathways to low-carbon fuels will never be as cost-effective (dollar-per-ton over time) as higher-carbon volume production of established, incumbent biofuels. The two should not be compared as both are necessary to continue a broad-based reduction of GHG. As was mentioned, a pathway to non-subsidized production is key, though this may not be reflected in the near-term cost-effectiveness numbers of the project.

Michael Coates
Mightycomm on behalf of Oberon Fuels
15466 Los Gatos Blvd., No. 109-380
Los Gatos, CA 95032
408.399.9081
cell 408.375.9305
mcoates@mightycomm.com
www.mightycomm.com