DOCKETED	
Docket Number:	19-ALT-01
Project Title:	2020-2021 Investment Plan Update for the Clean Transportation Program
TN #:	232607
Document Title:	Oberon Fuels Comments - Comments on Proposed 2020-21 Investment Plan for Clean Transportation Program
Description:	N/A
Filer:	System
Organization:	Oberon Fuels
Submitter Role:	Applicant
Submission Date:	3/30/2020 4:27:24 PM
Docketed Date:	3/30/2020

Comment Received From: Oberon Fuels

Submitted On: 3/30/2020 Docket Number: 19-ALT-01

Comments on Proposed 2020-21 Investment Plan for Clean Transportation Program

RE: Comments on Proposed Investment Plan for 2020-21 for Clean Transportation Program

Dear Commission Monahan:

The goal of the California Energy Commission's Clean Transportation Program from its beginning has been clear: "promote accelerated development and deployment of advanced transportation and fuel technologies― in the context of helping the state attain its carbon reduction targets and support the state's tailpipe emissions policies.

In reviewing the proposed investment plan for 2020-21 for the Clean Transportation Program, we believe there needs to be realignment of priorities to recognize the realities of where change is needed to move the state forward on climate issues.

Major challenges remain in the transition to electrified transportation. Placing a priority on zero-emission vehicle support is critical. Yet, the investment plan does not address the overwhelming scale of the remaining vehicle fleet in the state (some 90 percent) are internal combustion engine-powered using carbon-intense fossil fuels. Those ICE vehicles continue to produce the majority of GHG (more than 40% of all sources) and criteria pollutant emissions in the state. Overlooking this problem does not make it disappear.

Even the most rapid transition to an electrified transportation system envisioned by the state indicates that tens of millions of light-, medium-, and heavy-duty vehicles will continue to be fueled by petroleum fuels, bio-based fuels, gaseous fuels, and other innovative, low-carbon fuels in development or in the lab. Rather than downplay the low-carbon intensity benefits of these fuels – and their potential to enhance the state's most successful carbon reduction program, the Low Carbon Fuel Standard (LCFS) – the Energy Commission should dedicate a larger portion of its proposed \$146.2 million to this area rather than the mere \$10 million in the current plan.

The state's LCFS has been a great driver of the innovation and use of low carbon fuels. The CEC has the opportunity to spur further development of the fuels that power the vast majority of the vehicles on the road. In its own 2019-20 Investment Plan, the CEC estimated that more than 89% of the approximate 30 million vehicles in the state rely exclusively on either fossil gasoline or fossil diesel fuel.

Pure-electric car sales in California represented a total of a slightly more than 100,000

new cars sales in 2019 out of statewide sales of almost 2 million new cars and trucks. Providing alternatives to petroleum-based fuels has the chance to significantly and rapidly reduce the 13.9 billion gallons of gasoline and 3.3 billion gallons of diesel used per year in California.

Low-carbon liquid and gaseous fuels can have direct community benefits on numerous fronts: air quality improvements, job creation, waste mitigation, and resiliency. Because they can typically deploy on a large scale, those benefits to disadvantaged communities can be both direct and substantial. The barrier for members of disadvantaged communities to participate in low carbon fuels programs is much lower than that found in electrification programs since it usually does not require a new vehicle purchase. In addition, the ability to use local feedstocks sources to produce and consume fuel locally enable the air quality benefits to stay in the region in which was produced. In addition, good-paying jobs are created, allowing more people to participate in the growing renewable energy economy.

Increasing funding for the development and deployment of low-carbon fuels such as renewable DME is essential to furthering the state's required use of 30 percent renewable content in hydrogen transportation fuel. Oberon Fuels' dairy methane-to-rDME-to-rH2 pathway is exactly the type of innovation AB 118 envisioned. Advancing the state's EV charging infrastructure is important, but it should not come at the expense of ultra-low-carbon fuel development and deployment.

Slightly reducing the allocation on zero-emission vehicle infrastructure will not diminish the state's push to electrify the transportation sector. Other investments in that area are continuing at the state and local level through programs at the CARB and local air districts. Those programs include the VW Mitigation Trust Fund, CARB's Low Carbon Transportation programs and AQIP, the Carl Moyer Program, the Community Action Plan Program and others. In addition, the California Public Utilities Commission has allowed the three major investor-owned utilities to invest hundreds of millions of dollars in electric infrastructure.

The history of alternative fuel investments by the Energy Commission tells a very positive story of broad and measurable contributions to GHG and criteria pollutant reduction in disadvantaged communities and beyond. It also has resulted in substantial job creation.

For those reasons, we would encourage the Energy Commission to reorient the spending of the Clean Transportation Program to increase the amount spent on the development and commercialization of innovative, near-zero and low-carbon liquid and gaseous fuels so that they can continue and increase their contribution to the state's environmental goals.

Sincerely,

Rebecca Boudreaux, Ph.D.

President, Oberon Fuels rebecca@oberonfuels.com

Additional submitted attachment is included below.



March 30, 2020

RE: Comments on Proposed Investment Plan for 2020-21 for Clean Transportation Program

Dear Commission Monahan:

The goal of the California Energy Commission's Clean Transportation Program from its beginning has been clear: "promote accelerated development and deployment of advanced transportation and fuel technologies" in the context of helping the state attain its carbon reduction targets and support the state's tailpipe emissions policies.

In reviewing the proposed investment plan for 2020-21 for the Clean Transportation Program, we believe there needs to be realignment of priorities to recognize the realities of where change is needed to move the state forward on climate issues.

Major challenges remain in the transition to electrified transportation. Placing a priority on zero-emission vehicle support is critical. Yet, the investment plan does not address the overwhelming scale of the remaining vehicle fleet in the state (some 90 percent) are internal combustion engine-powered using carbon-intense fossil fuels. Those ICE vehicles continue to produce the majority of GHG (more than 40% of all sources) and criteria pollutant emissions in the state. Overlooking this problem does not make it disappear.

Even the most rapid transition to an electrified transportation system envisioned by the state indicates that tens of millions of light-, medium-, and heavy-duty vehicles will continue to be fueled by petroleum fuels, bio-based fuels, gaseous fuels, and other innovative, low-carbon fuels in development or in the lab. Rather than downplay the low-carbon intensity benefits of these fuels – and their potential to enhance the state's most successful carbon reduction program, the Low Carbon Fuel Standard (LCFS) – the Energy Commission should dedicate a larger portion of its proposed \$146.2 million to this area rather than the mere \$10 million in the current plan.

The state's LCFS has been a great driver of the innovation and use of low carbon fuels. The CEC has the opportunity to spur further development of the fuels that power the vast majority of the vehicles on the road. In its own 2019-20 Investment Plan, the CEC estimated that more than 89% of the approximate 30 million vehicles in the state rely exclusively on either fossil gasoline or fossil diesel fuel.

Pure-electric car sales in California represented a total of a slightly more than 100,000 new cars sales in 2019 out of statewide sales of almost 2 million new cars and trucks. Providing alternatives to petroleum-based fuels has the chance to significantly and rapidly reduce the 13.9 billion gallons of gasoline and 3.3 billion gallons of diesel used per year in California.

Low-carbon liquid and gaseous fuels can have direct community benefits on numerous fronts: air quality improvements, job creation, waste mitigation, and resiliency. Because



they can typically deploy on a large scale, those benefits to disadvantaged communities can be both direct and substantial. The barrier for members of disadvantaged communities to participate in low carbon fuels programs is much lower than that found in electrification programs since it usually does not require a new vehicle purchase. In addition, the ability to use local feedstocks sources to produce and consume fuel locally enable the air quality benefits to stay in the region in which was produced. In addition, good-paying jobs are created, allowing more people to participate in the growing renewable energy economy.

Increasing funding for the development and deployment of low-carbon fuels such as renewable DME is essential to furthering the state's required use of 30 percent renewable content in hydrogen transportation fuel. Oberon Fuels' dairy methane-to-rDME-to-rH₂ pathway is exactly the type of innovation AB 118 envisioned. Advancing the state's EV charging infrastructure is important, but it should not come at the expense of ultra-low-carbon fuel development and deployment.

Slightly reducing the allocation on zero-emission vehicle infrastructure will not diminish the state's push to electrify the transportation sector. Other investments in that area are continuing at the state and local level through programs at the CARB and local air districts. Those programs include the VW Mitigation Trust Fund, CARB's Low Carbon Transportation programs and AQIP, the Carl Moyer Program, the Community Action Plan Program and others. In addition, the California Public Utilities Commission has allowed the three major investor-owned utilities to invest hundreds of millions of dollars in electric infrastructure.

The history of alternative fuel investments by the Energy Commission tells a very positive story of broad and measurable contributions to GHG and criteria pollutant reduction in disadvantaged communities and beyond. It also has resulted in substantial job creation.

For those reasons, we would encourage the Energy Commission to reorient the spending of the Clean Transportation Program to increase the amount spent on the development and commercialization of innovative, near-zero and low-carbon liquid and gaseous fuels so that they can continue and increase their contribution to the state's environmental goals.

Sincerely,

Rebecca Boudreaux, Ph.D. President, Oberon Fuels

Rebecca Bourreaux

rebecca@oberonfuels.com