Comment 1 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Lisa Last Name: McGhee

Email Address: lisa@greenpowermotor.com Affiliation: GreenPower Motor Company

Subject: Modifications: Immediate action is needed. Include MHD EV Charging & update EER

for MHD Comment:

Below are comments from GreenPower Motor Company and we appreciate CARB's interest in future changes; however, action must be immediate.

MHD Infrastructure Crediting Application:

The proposal currently only recommends Hydrogen. This is not adequate and is not moving us forward to N-79-20. The reasoning per CARB was that they had mainly only heard from the Hydrogen technology group on this need. This does not justify what is necessary in the field to meet and support the requirements of the mandate.

This needs to support and align the MHD fleet operators' needs and to continue to develop an ecosystem. The EV Medium-Duty sector and vehicles can immediately perform the fleet route and jobs. As such, we need to continue to meet the needs of the small size fleets, private, and independent drivers whereby infrastructure to support them is critical. Truck and Bus Dealerships and Garage Services and support centers can do this and it makes practical sense to have an application for MHD on both ZEV technologies including EV Fast Charging.

We recommend the following modification and to include EV MHD Charging Infrastructure applications. Consideration to include EV MHD infrastructure for the EV MHD vehicle deployment goal needs to anticipate the scaling needs and accessibility for these larger vehicles with larger battery packs. It is critical to align with the CI targets and ZEV MHD mandates with EV Charging station locations and immediately. For example, MHD commercial enterprise dealerships have an interest and have the opportunity to improve their business model as they face implementing a program to support EV technology. They depend on parts and services as their main revenue source and they have locations that could bundle programs to include charging as they tend to be located in urban and densely populated hub areas and already implement a program to support customers with MHD buses and trucks. Additionally, these centers have space for these larger vehicles. This will harmonize a solution with the mandates and an integrated EV charging model for dealerships allows for a new revenue stream from the EV charging and capacity credits.

This could or could not be available to public access, in general,

I suggest a program that encourages public access at some reasonable level in the design.

An MHD program will likely prove to be more cost-effective than LDA toward the unused capacity which the current program generates. Further, MHD charging infrastructure could benefit and perfectly align with your new battery storage business consideration and I would encourage a % of battery storage to be included for Peak Time use Hours (maybe a 2-hour window) to continue to support grid constraints at Peak time and establish smarter designs that benefit the technology, end-users, and utility and society.

Update to the EER data:

An EER data update is required to establish EV Vehicle Standards with the MHD Class vehicles under the baseline method.

The Current program does not logically result in a method that supports the best and most efficient MHD EV's.

We need to begin developing awareness toward an EV MHD fuel economy standard for each MHD class whereby the most efficient kWh/mile achieves more credits and more opportunities toward increased revenues. For example:

Class 4-6 as one category Class 7-8 as one category Instead of currently all Class 4-8 in one category.

The Fuel economies from the MHD should create a standard for the specific vehicle class as the amount of battery storage that is installed in the vehicle is similar to the class size. OEM's should design the technology with quality and with the best engineering judgment and components that achieve the best fuel economy. This directly impacts the fleets and ensures the technology creates a cost-per-mile benefit.

I do not object to the fuel density equivalent method. What needs updating is another step for converting the kWh/mile efficiency to a result that is higher and better for the most efficient class of MHD EV vehicles. Moreover, with this change, the less efficient vehicles will NOT continue gaining more credits as they currently can generate (see figure in attachment).

Essentially creating consideration for an average fuel economy standard for each MHD class is necessary and this will result in the best and most efficient vehicles with the most credits.

~Lisa McGhee GreenPower Motor Company

Attachment: www.arb.ca.gov/lists/com-attach/6-lcfs-wkshp-dec21-ws-WjZVMFI1AiIGX1cn.pdf

Original File Name: LCFS proposed Changes GP comments 12-8-21.pdf

Date and Time Comment Was Submitted: 2021-12-08 07:47:05

Comment 2 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Mikhael Last Name: Skvarla

Email Address: mikhael_skvarla@gualcogroup.com Affiliation: on behalf of Ca Hydrogen Coalition

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/10-lcfs-wkshp-dec21-ws-WzNTMVULUGsKflc+.pdf

Original File Name: HD HRI Proposal and Coalition Letter.pdf

Date and Time Comment Was Submitted: 2021-12-08 11:53:11

Comment 3 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jeremy Last Name: Mall

Email Address: jmall@murexltd.com

Affiliation: Murex

Subject: 2022 Scoping Plan

Comment:

I would like to bring a couple items to ARB attention.

First is that as I project credit/deficit generation forward, ARB will need to deal with credit generations in 2023, 2024, 2025, and 2026 that put the entirety of the program in jeopardy. I show net credit generation of ~1.5 million tons projected for 2022 (which is manageable) but net credit generation of 7+ million per year for the next 5 years with a peak net credit generation over 11 million in 2025 and a cumulative credit bank approaching 60 million tons by 2028. Carbon reduction based projects will fail and banks will stop financing projects. Innovation will stall. It will be tough to get beyond a 25% reduction much less hit net zero targets. There is also no scenario where a straight line regression can solve this problem without forcing potentially damaging ramifications in later years. I would suggest ARB explore a significant step down in 2023, 2024, and 2025 to address all the new renewable diesel projects starting up during this period followed by a flat line regression to 2030. I would also suggest you make this change before the 2023 Rulemaking process.

Second, I am disappointed that the program is now picking technology winners and losers with its push for ZEVs. Don't get me wrong, I understand the need for California to incentivize ZEVs because of its geography and the health and safety benefits to forcing any combustion, including combustion to generate electrical power, outside of the state. That said, the amount of innovation the program spurred because it was technology agnostic was astonishing to watch. I fear you will lose some of this innovative spirit by forcing a technology into the market.

One of the program's core goals is to have a platform that is expandable into other geographies. Doing so with a forced technology platform, especially one that requires the amount of growth ZEVs require, is dangerous and shortsighted. I would appreciate if ARB would note that not all geographies have as clean of electricity as California and some areas may have non-ZEVs that are actually better for the environment than battery vehicles.

Lastly, I would urge you to consider fuels made from forest management in this scoping plan. CA forests have changed from a carbon sink to a carbon emitter due to the drought and wildfires caused by climate change. Forest management practices can reduce the probability for wildfire and resulting uncontrolled burn emissions associated with them. It can also save lives. It won't be perfect but it could help.

Thank	you	for	your	time	and	please	feel	free	to	reach	out	if	you
have	any	quest	cions	about	my	comment	s abo	ove.					

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-12-10 10:53:31

Comment 4 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Xenia Last Name: Seliverstov

Email Address: xseliver@sgh2energy.com

Affiliation:

Subject: SG H2 Energy Global LLC

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/12-lcfs-wkshp-dec21-ws-lists/com-attach/12-lcfs-wkshp-dec21-wks-lists/com-attach/12-lcfs-wkshp-dec21-wks-lists/com-attach/12-lcfs-wkshp-dec21-wks-lists/com-attach/12-lcfs-wkshp-dec21-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-lcfs-wks-lists/com-attach/12-l

UTIBaAZqAjwFZgRq.docx

Original File Name: comments_2.docx

Date and Time Comment Was Submitted: 2021-12-13 12:54:02

Comment 5 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Patrick Last Name: McDuff

Email Address: pat@californiafueling.com

Affiliation: California Fueling LLC

Subject: Time to Reassess Renewable Diesel's Emissions

Comment:

see attached.

Attachment: www.arb.ca.gov/lists/com-attach/14-lcfs-wkshp-dec21-ws-

WjYBZFQzACAGXwBw.pdf

Original File Name: LCFS Public Comment - 12.20.21.pdf

Date and Time Comment Was Submitted: 2021-12-20 08:16:48

Comment 6 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Maude Last Name: Lauzon

Email Address: mlauzon@enerkem.com

Affiliation: Enerkem

Subject: Enerkem Comments on potential future changes to the LCFS

Comment:

Please find attached Enerkem Comments on potential future changes to the LCFS.

Attachment: www.arb.ca.gov/lists/com-attach/15-lcfs-wkshp-dec21-ws-AjBRZl1tWThRZQY3.pdf

Original File Name: 211221 Enerkem Comments on potential future changes to the LCFS_final.pdf

Date and Time Comment Was Submitted: 2021-12-22 06:49:42

Comment 7 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ben Last Name: Granholm

Email Address: ben@westernpga.org

Affiliation: WPGA

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/16-lcfs-wkshp-dec21-ws-AnVXIVUzUGJVDFI+.pdf

Original File Name: WPGA Letter RE CARB December 7th LCFS Workshop (1).pdf

Date and Time Comment Was Submitted: 2022-01-04 12:37:20

Comment 8 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Miles Last Name: Heller

Email Address: hellermt@airproducts.com

Affiliation: Air Products

Subject: December 7th LCFS Workshop Comments

Comment:

Air Products appreciates the opportunity to provide feedback. Attached please find our comments.

Attachment: www.arb.ca.gov/lists/com-attach/18-lcfs-wkshp-dec21-ws-UDEHaAd0U18GcAR2.pdf

Original File Name: Air Products Comments December 7 2021 LCFS final.pdf

Date and Time Comment Was Submitted: 2022-01-05 09:22:07

Comment 9 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jeremy Last Name: Martin

Email Address: jmartin@ucsusa.org

Affiliation: Union of Concerned Scientists

Subject: Manure biomethane issues

Comment:

Please see the attached comment and analysis on the need to revisit the treatment of manure biomethane under the LCFS.

Attachment: www.arb.ca.gov/lists/com-attach/24-lcfs-wkshp-dec21-ws-AHVSN1MhVlpXNQRl.pdf

Original File Name: UCS Dairy CAFO research memo.pdf

Date and Time Comment Was Submitted: 2022-01-06 06:47:02

Comment 10 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Evan Last Name: Edgar

Email Address: evan@edgarinc.org

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/25-lcfs-wkshp-dec21-ws-dec21-

UzBXMFIhUmMCW1Ix.pdf

Original File Name: CARB CI LCFS Jan 2022 (1).pdf

Date and Time Comment Was Submitted: 2022-01-06 08:17:50

Comment 11 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jane Last Name: O'Malley

Email Address: j.omalley@theicct.org

Affiliation: ICCT

Subject: ICCT comments

Comment:

ICCT comments on Dec. 7, 2021 LCFS workshop

Attachment: www.arb.ca.gov/lists/com-attach/26-lcfs-wkshp-dec 21-ws-ment and the state of the

B2RdOgRaV2gAZQRi.pdf

Original File Name: CA LCFS workshop comments_Jan 2022_ICCT.pdf

Date and Time Comment Was Submitted: 2022-01-06 08:38:39

Comment 12 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Val Last Name: Menotti

Email Address: cwatson@calstrat.com

Affiliation:

Subject: BART Comments on LCFS Workshop

Comment:

See attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/27-lcfs-wkshp-dec21-ws-VTddOlUmBCMFXFU2.pdf

Original File Name: BART Comments - Potential Changes to LCFS Program_120721

Workshop_Final.pdf

Date and Time Comment Was Submitted: 2022-01-06 09:07:18

Comment 13 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Christina Last Name: Reynolds

Email Address: christina@remoracarbon.com

Affiliation: CEO, Remora

Subject: Mobile carbon capture: a new method to reduce transportation emissions

Comment:

See documents attached. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/30-lcfs-wkshp-dec21-ws-

B3VUNwBsAj4EcFU0.zip

Original File Name: Remora_LCFS.documents.zip

Date and Time Comment Was Submitted: 2022-01-06 12:14:58

Comment 14 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Brit Last Name: Moller

Email Address: brit.moller@spin.pm Affiliation: Spin (Ford Mobility)

Subject: Development of EERs for micromobility

Comment:

Dear Chair Liane M. Randolph,

As a subsidiary of Ford Motor Company, Spin is an industry leader in offering shared micromobility solutions, including e-scooters and e-bikes. Over the last four years, Spin has greatly expanded the availability of e-scooters and e-bikes for hire in over 113 cities and universities across North America and Europe. Each day, hundreds of thousands of Americans rely on Spin e-scooters and other microbility options to conveniently get to work, school, or visit local retail businesses in their communities. In the context of COVID-19, the value of micromobility as a vital transportation option has also become more apparent. By eliminating the highest risk factors for coronavirus transmission, electric scooters offer two distinct safety advantages compared to other modes of shared transportation: The ability to 1) ride alone and 2) stay outdoors. These public-health advantages explain why many U.S. cities quickly declared electric scooters an "essential service" and integral part of their local transportation ecosystem.

Beyond the value to riders, shared micromobilty also offers broader potential as a sustainable transportation alternative to gasoline-based cars and motor vehicles. This is particularly true in cities, where the majority of trips are short-distance (e.g. less than 3 miles) and congestion and pollution from cars is a persistent and growing issue. Fortunately, within the micromobillity industry, there is a growing recognition that more must be done to improve the underlying sustainability of all elements of operations. At Spin, for example, these efforts include using 100% renewable electricity to charge our fleets (i.e. e-scooters and e-bikes), replacing gas vans with electric vans and other sustainable vehicles such as e-cargo bikes and electric low-speed vehicles to serve operational needs, and using swappable and long-range batteries to reduce the need for transporting scooters to our warehouses for charging, so e-scooters and e-bikes can remain on the street available for use.

In reference to CARB's public workshop on changes to the LCFS Program, we have included some relevant data (see attached file) to help inform the development of new energy economy ratios (EERs) for "battery-electric micromobility applications." Specifically, our data includes a recent Life Cycle Analysis (LCA) of our latest e-scooter vehicle completed by the Massachusetts Institute of Technology, along with aggregated mode shift survey results from our riders in California. These mode shift surveys shed light on the decision making behind why people chose to use shared

e-scooters and e-bikes over other transportation options, including private cars, rideshare Apps, public transportation, and walking. Encouragingly, over 27% of our respondents said they decided to ride an e-scooter rather than a private car or rideshare option (e.g. Lyft or Uber). Still, we recognize that significantly more mode shift away from cars is needed. Spin recently published a report (see attached file) on the factors that we believe can enable and encourage such mode shift and what we are doing to promote greater mode shift.

Looking ahead, we strongly support the creation of new energy economy ratings (EERs) for micromobility to help achieve CARB's stated objective of accelerating the transition to zero-emission vehicles (ZEVs). As your staff continues the consultation process, we encourage you to reach out for additional data and technical input as needed. At the moment, we are working with researchers from UC Davis to conduct additional mode shift research based on our data and to better understand what drives mode shift so we can enable greater mode shift to happen in the future. Such inputs may be useful for your team to inform the development of EERs for micromobility by leveraging the latest industry and independent research available.

Thank you for your consideration, and we look forward to continue working with your team on this important issue. If you have any follow up questions or additional data needs, please do not hesitate to contact us directly.

Sincerely,

Brit Moller

Attachment: www.arb.ca.gov/lists/com-attach/31-lcfs-wkshp-dec21-ws-UTJdOgBzUGFQCQRn.pdf

Original File Name: CARB Comment Letter (Final).pdf

Date and Time Comment Was Submitted: 2022-01-06 12:28:03

Comment 15 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Steve Last Name: Kloos

Email Address: steven.kloos@aquahydrex.com

Affiliation: AquaHydrex

Subject: AquaHydrex Comments on December 7 LCFS Workshop

Comment:

Please find our comment letter attached.

Attachment: www.arb.ca.gov/lists/com-attach/32-lcfs-wkshp-dec21-ws-WjtUI1A5WFQKb1I9.pdf

Original File Name: AQH Comments on Dec 2021 LCFS Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-06 12:55:22

Comment 16 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Heidi Last Name: Sickler

Email Address: hsickler@amplypower.com

Affiliation: AMPLY Power

Subject: Potential Future Changes to the LCFS Program.

Comment:

Dear Mr. Sahora,

AMPLY Power ("AMPLY") appreciates the opportunity to submit the attached comments on the potential future changes to the Low Carbon Future Standard ("LCFS") program.

AMPLY Power provides Charging-as-a-Service to de-risk and accelerate the adoption of electric vehicles by public and private fleet operators through its simple price-per-mile driven model. AMPLY provides fully managed charging and software solutions that enable municipal and commercial fleets to deploy electric vehicle fleets confidently and without hassles. AMPLY handles all aspects of charging operations on behalf of fleet owners, and AMPLY's charging systems are optimized for the lowest electricity costs. AMPLY is now delivering 100 percent clean energy to its electric fleet customers. We now ensure only California-sourced renewable power from wind and solar sources is used by our California fleet customers in order to reduce the effects of climate change through the adoption of clean energy.

Sincerely,

Heidi Sickler Director of Policy AMPLY Power

Attachment: www.arb.ca.gov/lists/com-attach/33-lcfs-wkshp-dec21-ws-UTAAa1wtBToEewVa.pdf

Original File Name: AMPLY Comments on CARB Potential Future Changes to the LCFS Program_January 6, 2022.pdf

Date and Time Comment Was Submitted: 2022-01-06 13:13:46

Comment 17 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Glenn Last Name: Johnston

Email Address: glenn.johnston@nuseed.com

Affiliation: Nuseed

Subject: Cover Crop Soil Carbon Proposal LCFS Future Change

Comment:

Nuseed is submitting for consideration by the California Air Resources Board (ARB) this proposal for future changes in the LCFS program to include non-food cover crops, including crops that are contract grown and harvested such as Nuseed Carinata, in the program and allow their GHG savings and soil carbon benefits be accounted in the modeling (CA GREET + Soil Carbon Model).

Attachment: www.arb.ca.gov/lists/com-attach/34-lcfs-wkshp-dec21-ws-WjZXMlw7UnIGX1Uz.pdf

Original File Name: LCFS Feedback Jan 2022.pdf

Date and Time Comment Was Submitted: 2022-01-06 13:20:35

Comment 18 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Helena Last Name: Birecki

Email Address: hgb21@hotmail.com Affiliation: Climate Reality Bay Area

Subject: For sustainability, Biofuels growth must be limited. Cleaner options +use reduction

needed Comment:

The changes you are considering to the LCFS program will catalyze changes that last for many years to come.

For this reason I strongly echo the ICCT (International Council on Clean Transportation's) comment that recommends "that CARB sets a cap on the volumes of lipid-based biofuels credited within the LCFS to limit growth to the amount that can be sustainably supplied from domestic resources."

I further urge you to remove the assumption that between 25 and 50% of animal and human food calories diverted to biofuels will not be replaced (graph sharable by permission from presentation by Tim Searchinger, Senior Fellow at World Resources Institute, attached). The middle and upper class throughout the world eats more, and in fact more meat, now than ever before. It will be those who are already struggling to survive that suffer.

I also ask you to consider that the health of those living near refineries is harmed extensively, and a "switch" from fossil fuels to biofuels does not alleviate that harm. Only a reduction in pollution, and a promotion of truly clean energy sources vs false solutions, will help.

I hear that currently there are no "good solutions" for some industries. However, consider that human health absolutely depends on adequate sources of food. In contrast, aviation, which didn't even exist when my grandfather was born, is clearly non-essential.

I laud CARB's mission, which first and foremost is to "promote and protect public health, welfare, and ecological resources." Please accomplish it by keeping pubic health, welfare and sustainability the top priorities in your decision-making. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/36-lcfs-wkshp-dec21-ws-VDdWMVwvBTQCWwNg.png

Original File Name: CARB Calculations on biofuels.png

Date and Time Comment Was Submitted: 2022-01-06 13:34:57

Comment 19 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Keith Last Name: Adams

Email Address: kadams@climeco.com

Affiliation: ClimeCo

Subject: Comments Regarding the Low Carbon Fuel Standard - Potential Regulation

Amendments Comment:

Comments supporting the consideration of low carbon intensity ammonia as a critical input to fertilizers in the fuel lifecycle pathways of biofuels and as a hydrogen carrier.

Attachment: www.arb.ca.gov/lists/com-attach/37-lcfs-wkshp-dec21-ws-VDdQOgFpAz1XNABj.pdf

Original File Name: ClimeCo - LCFS Amendment Workshop Comments.pdf

Date and Time Comment Was Submitted: 2022-01-06 14:04:23

Comment 20 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ryan Last Name: Kenny

Email Address: Ryan.Kenny@cleanenergyfuels.com

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/38-lcfs-wkshp-dec21-ws-UjEHbVI9WW9VDAdk.pdf

Original File Name: CLNE Comment Letter LCFS Changes 01-06-2022.pdf

Date and Time Comment Was Submitted: 2022-01-06 14:08:10

Comment 21 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Kimberlee Last Name: Stryker

Email Address: kstrykerdesign@gmail.com

Affiliation: Climate Reality Project

Subject: Request CARB limitations on biofuels in California

Comment:

Please see attached comments. Thank you. Kim Stryker

Attachment: www.arb.ca.gov/lists/com-attach/39-lcfs-wkshp-dec21-ws-B3VcP1U5V2ULfwds.docx

Original File Name: remarks to CARB public comment biofuels 1 2022.docx

Date and Time Comment Was Submitted: 2022-01-06 14:02:09

Comment 22 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Stan Last Name: Ross

Email Address: sross@recover-energy.com

Affiliation: Recover Inc.

Subject: Proposed Changes to LCFS Program

Comment:

Recover Inc. is pleased to upload this letter to CARB which outlines proposed changes to the LCFS program.

Attachment: www.arb.ca.gov/lists/com-attach/40-lcfs-wkshp-dec21-ws-ViQFZlw+BzsCcgJn.pdf

Original File Name: Recover Inc - Proposed Changes to LCFS Program.pdf

Date and Time Comment Was Submitted: 2022-01-06 14:10:40

Comment 23 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: R.Huggins Last Name: PineSpire

Email Address: contact@pinespire.com

Affiliation:

Subject: Comments on Proposed LCFS Rulemaking 2022

Comment:

please see our attached comments on the Proposed LCFS rulemaking

Attachment: www.arb.ca.gov/lists/com-attach/41-lcfs-wkshp-dec21-ws-VCRSPQNsUmQEcQd3.pdf

Original File Name: PineSpire_Comments on Proposed LCFS Rulemaking 1.6.22.pdf

Date and Time Comment Was Submitted: 2022-01-06 15:24:58

Comment 24 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Mihaly Last Name: Wekler

Email Address: mwekler@elementmarkets.com

Affiliation: Element Markets, LLC

Subject: Element Markets LCFS Rulemaking Comments

Comment:

Element Markets, LLC comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/42-lcfs-wkshp-dec21-ws-UDxWMwZhAyNVDAd1.pdf

Original File Name: LCFS Rulemaking Comments Element Markets_sent2022jan6.pdf

Date and Time Comment Was Submitted: 2022-01-06 17:52:08

Comment 25 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Laura

Last Name: Berland-Shane

Email Address: laura@blueplanetsystems.com

Affiliation: Blue Planet

Subject: LCFS Workshop Comments

Comment:

Please find our comment letter attached.

Attachment: www.arb.ca.gov/lists/com-attach/43-lcfs-wkshp-dec 21-ws-dec 21

UDICaARwUGYHXlQk.pdf

Original File Name: Blue Planet LCFS workshop comments.pdf

Date and Time Comment Was Submitted: 2022-01-06 19:39:03

Comment 26 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Rebecca Last Name: O'Brien

Email Address: rebeccaobrien@tnrenewableenergy.com

Affiliation: True North Renewable Energy

Subject: December 7, 2021 LCFS Workshop Comments

Comment:

Please find our comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/44-lcfs-wkshp-dec 21-ws-AXVXP1AjAzUAWQBs.pdf

Original File Name: TNRE LCFS Dec 7 Workshop Comment Letter.pdf

Date and Time Comment Was Submitted: 2022-01-06 19:47:02

Comment 27 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: David Last Name: Schlosberg

Email Address: david@terawattinfrastructure.com

Affiliation: TeraWatt Infrastructure, Inc.

Subject: TeraWatt Infrastructure Comments on Public Workshop to Discuss Potential Future

Changes to Comment:

Attached please find TeraWatt Infrastructure's comments on the Dec 7, 2021 LCFS Workshop.

Attachment: www.arb.ca.gov/lists/com-attach/45-lcfs-wkshp-dec21-ws-VSFdPlYlAzFSIwFg.pdf

Original File Name: TeraWatt LCFS Comments January 2022 .pdf

Date and Time Comment Was Submitted: 2022-01-06 19:48:11

Comment 28 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ron Last Name: Alverson

Email Address: rsalv@itctel.com

Affiliation:

Subject: Comments on Public Workshop to Discuss Potential Future Changes to the LCFS

Program Comment:

Please accept the attached comments on "Public Workshop to Discuss Potential Future Changes to the LCFS Program."

Attachment: www.arb.ca.gov/lists/com-attach/46-lcfs-wkshp-dec21-ws-UDNQOQdrUG4KaQNt.pdf

Original File Name: Comments on Public Workshop to Discuss Potential Future Changes to the LCFS Program.pdf

Date and Time Comment Was Submitted: 2022-01-07 07:27:23

Comment 29 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: David Last Name: Zaziski

Email Address: dzaziski@infiniumco.com

Affiliation: Infinium

Subject: Infinium Comments on December 7 LCFS Workshop

Comment:

Please find attached Infinium comments on December 7 LCFS Workshop

Attachment: www.arb.ca.gov/lists/com-attach/47-lcfs-wkshp-dec21-ws-VTwAaFUyWGIDa1Q9.pdf

Original File Name: Infinium Comments to LCFS Workshop (Jan 7 2022).pdf

Date and Time Comment Was Submitted: 2022-01-07 08:30:01

Comment 30 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Steve Last Name: Wirtel

Email Address: swirtel@koreinfrastructure.com

Affiliation: Kore Infrastructure

Subject: Kore Infrastructure leverages LCFS to help solve pressing environmental challenges in

CA

Comment:

Kore Infrastructure has developed technology to convert biogenic waste into carbon negative, renewable energy in the form of biogas, renewable natural gas, renewable hydrogen, and biocarbon (a soil amendment or coal substitute.) We are operating a commercial scale demonstration facility (24 tons/day) in downtown Los Angeles at a site owned by SoCalGas. The facility is fully permitted and supported by the South Coast Air Quality Management District.

Kore technology is able to help solve two of California's most pressing challenges:

- 1. beneficial use of agricultural residues and forest thinning biomass in a manner that doesn't generate greenhouse gases (and in many applications is carbon negative.)
- 2. producing low carbon intensity fuels to decarbonize California transportation.

This technology is engineered and manufactured in California and can be rapidly deployed as standard, skid-mounted units to provide distributed waste management and renewable energy production.

We support the LCFS program, the extension of the LCFS carbon intensity schedule to 2045, and an increase in the rate of carbon intensity reductions. We also look forward to engagement on the issues relating to hydrogen as these are more fully developed in the rulemaking process.

As we transition from demonstration to commercialization, the business case for our solution is greatly enhanced by the LCFS program.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2022-01-07 09:14:33

Comment 31 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Max

Last Name: DuBuisson

Email Address: mdubuisson@indigoag.com

Affiliation: Indigo Ag

Subject: Inclusion of field-based practices in Low Carbon Fuel Standard

Comment:

Dr. Laskowski:

Please see the attached letter from Indigo Ag about including field-based practices in updates to the Low Carbon Fuel Standard.

Sincerely,

Max DuBuisson

Attachment: www.arb.ca.gov/lists/com-attach/49-lcfs-wkshp-dec21-ws-VD1dNVA1ADoLagZp.pdf

Original File Name: Indigo_LCFS_CARB_010722.pdf

Date and Time Comment Was Submitted: 2022-01-07 08:47:24

Comment 32 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Tyler Last Name: Lobdell

Email Address: tlobdell@fwwatch.org Affiliation: Food & Water Watch

Subject: Potential Changes to LCFS Workshop Comments

Comment:

Please find our comments attached. Thank you for your time and consideration.

Attachment: www.arb.ca.gov/lists/com-attach/50-lcfs-wkshp-dec21-ws-VWdQZlxvVDZQeFdn.pdf

Original File Name: 2021.01.07_LCFS Workshop Cmts_Final.pdf

Date and Time Comment Was Submitted: 2022-01-07 09:33:15

Comment 33 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: David

Last Name: Roland-Holst

Email Address: dwrh@berkeley.edu

Affiliation: UC Berkeley

Subject: Expanding LCFS to Support California Agriculture: Putting waste biomass to work for

food Comment:

Public Comment for CARB's LCFS Program 1/7/22

Expanding LCFS to Support California Agriculture: Putting waste biomass to work for food security, air quality, job creation, and climate risk reduction

California currently produces an annual flow of more than 50 million metric tons (MMT) of waste biomass per year, the volume of which is rapidly accelerating because of efforts to contain the state's wildfire emergency. Farm and food processing waste comprise over one quarter of this material, and like other biomass it presents a substantial challenge to the state's greenhouse gas (GHG) mitigation goals. Burning agricultural waste has recently been banned because of this and public health risks but hauling this material to landfill merely displaces waste storage capacity while deferring emissions to decomposition. It has long been understood that recycling this material can improve soil productivity, but the traditional methods for this, direct mulching and composting, are relatively inefficient and emission-intensive, requiring storage capacity and contributing significantly to the 20% of global GHG emissions attributable to agriculture.

Figure 1: Green Energy from Agricultural Waste

As a leading state initiative for decarbonization, LCFS is too limited in scope. Transport fuels are not the only significant biogenic pathway to displace fossil fuel use and its attendant environmental damage. Thanks to modern bioenergy science and technology, alternatives exist that can largely transform this waste biomass, converting it into biofuels, agrochemicals, and soil amendments that substantially reduce agriculture's carbon footprint while robustly enhancing soil productivity, food security, and rural livelihoods. The primary agrochemical output of this process (Figure 1) is green fertilizer produced from biogas. This biogenic chemical has the same productivity benefits as conventional fertilizer, but it also displaces the fossil fuels usually required to produce conventional synthetic fertilizer. Beyond this innovation, other valuable products and services of this biomass conversion include waste reduction, biochar for soil amendment and carbon sequestration, and a variety of other green energy services

illustrated in the flowchart. Compared to composting, which directly releases highly radiative methane emissions and also presents health and sanitation risks (including rodents, other vermin, and an array of pathogenic microorganisms), gasification re-forms biogenic carbon into fossil fuel substitutes. While green fertilizer improves soil productivity and agrifood sustainability, it also displaces natural gas. Likewise, biodiesel and biogasoline can displace liquid fossil fuels in farm mechanization, vehicles, heating, and electric power.

Using modern mobile gasification technologies (e.g. https://cariboubiofuels.com/) to process biomass at or near individual farms, all these benefits can be integrated into farm operations, saving money on inputs, adding value, and conferring economic and environmental benefits across rural communities, some of the most disadvantaged in the state.. In addition to the direct values of soil productivity and clean energy services, farms reduce their costs for (and emissions from) conventional energy and agrochemicals. We argue that these bioenergy conversion pathways should be recognized by CARB with LCFS carbon credit certification like livestock waste management is today. Expanding LCFS for biomass conversion would provide additional livelihood benefits to farmers and stimulate further green innovation across California. State-of-the-art biomass conversion can be a potent catalyst for progress, enabling agriculture, forestry, and municipal solid waste management to take fuller partnership in the Golden State's quest for sustained and inclusive prosperity.

Thank you for your consideration.

Respectfully,
David Roland-Holst, PhD
Managing Director, Berkeley Economic Advising and Research
Adjunct Professor, Department of Agricultural and Resource
Economics, UC Berkeley
dwrh@berkeley.edu
510-421-0365

Attachment: www.arb.ca.gov/lists/com-attach/51-lcfs-wkshp-dec21-ws-VzRTNFMgAjMAWQll.pdf

Original File Name: CARB LCFS Comments Green Agrochemicals BEAR.pdf

Date and Time Comment Was Submitted: 2022-01-07 09:41:44

Comment 34 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Roel

Last Name: Hammerschlag

Email Address: roel@hammerschlag.llc

Affiliation: Hammerschlag LLC

Subject: Comments on LCFS five-year scoping plan

Comment:

see attachment

Attachment: www.arb.ca.gov/lists/com-attach/52-lcfs-wkshp-dec21-ws-

AGgFYIU5AD4KaQNx.pdf

Original File Name: Hammerschlag LLC comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 09:26:14

Comment 35 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Chris Last Name: Vervaet

Email Address: chris.vervaet@copacanada.com

Affiliation: Canola Council / Canadian Oilseed Proces

Subject: Canola Council of Canada submission

Comment:

Please find submission enclosed.

Attachment: www.arb.ca.gov/lists/com-attach/55-lcfs-wkshp-dec21-ws-VTYBZAFjVVkGcwh9.pdf

Original File Name: CCC submission_Dec 7 2021 CARB Workshop_final.pdf

Date and Time Comment Was Submitted: 2022-01-07 09:55:56

Comment 36 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Blake Last Name: Simmons

Email Address: blake.alex.simmons@gmail.com

Affiliation:

Subject: Low Carbon Fuel Incentives for Local Public Safety, Health, and Inclusive Economic

Growth Comment:

Hello-

Please find attached some comments for your consideration.

Best regards

Blake Simmons

Attachment: www.arb.ca.gov/lists/com-attach/56-lcfs-wkshp-dec21-ws-B2RcO10uUGFRegJu.docx

Original File Name: CARB-LCFS for State Priorities - Public Comment Simmons.docx

Date and Time Comment Was Submitted: 2022-01-07 10:03:20

Comment 37 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Amy Last Name: Roth

Email Address: Amy.Roth@ebresources.com

Affiliation: E&B Natural Resources Management Corp.

Subject: E&B LCFS Comment Letter

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/59-lcfs-wkshp-dec 21-ws-left www.arb.ca.gov/lists/com-attach/brance/

Wz4FYVcJAzxXMgJk.pdf

Original File Name: EB LCFS Com Ltr.pdf

Date and Time Comment Was Submitted: 2022-01-07 10:36:45

Comment 38 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Shayne Last Name: Petkiewicz

Email Address: shayne.petkiewicz@anaergia.com

Affiliation:

Subject: Anaergia comments on Public Workshop to Discuss Potential Future Changes to the

LCFS Progr Comment:

See attached letter for comments.

Attachment: www.arb.ca.gov/lists/com-attach/60-lcfs-wkshp-dec21-ws-UjNXP1ExWG5RJQJl.pdf

Original File Name: Anaergia CARB LCFS 20220107.pdf

Date and Time Comment Was Submitted: 2022-01-07 10:41:53

Comment 39 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ray Last Name: Ambrose

Email Address: jthapa@ajw-inc.com

Affiliation: Elk Petroleum

Subject: Elk Petroleum Comments on Potential Changes to the LCFS

Comment:

Please see attached document for our comments.

Attachment: www.arb.ca.gov/lists/com-attach/62-lcfs-wkshp-dec21-ws-AjACNlNiWDoLPVdg.pdf

Original File Name: 220107 Elk Comments on CARB Potential Future Changes to the LCFS

Program Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 10:14:00

Comment 40 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Mark Last Name: Stoermann

Email Address: mstoerm@newtrient.com

Affiliation:

Subject: Newtrient Comments Changes to the LCFS

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/63-lcfs-wkshp-dec21-ws-VDoGZQdxVnFSJgdu.pdf

Original File Name: Newtrient Comments Changes to the LCFS.pdf

Date and Time Comment Was Submitted: 2022-01-07 11:07:47

Comment 41 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Marc Last Name: Whitezell

Email Address: mwhitezell@sentinelpeakresources.com

Affiliation:

Subject: Inclusion of Lower CI Technology

Comment:

Please see the attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/64-lcfs-wkshp-dec21-ws-

BmoGY1YxWHhRCAR2.pdf

Original File Name: LCFS Rulemaking Letter 1-7-22.pdf

Date and Time Comment Was Submitted: 2022-01-07 12:09:22

Comment 42 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Kieran Last Name: Mitchell

Email Address: kieran@cariboubiofuels.com

Affiliation: Caribou Biofuels, Inc.

Subject: Resubmitting Industry Stakeholder Comments

Comment:

Submitting my comments a second time as I received an error message that my file did not upload the first time.

Attachment: www.arb.ca.gov/lists/com-attach/68-lcfs-wkshp-dec21-ws-AGMHYANwVWQEXQdr.docx

Original File Name: CARB LCFS 1.7.22 Caribou Comments.docx

Date and Time Comment Was Submitted: 2022-01-07 12:26:33

Comment 43 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Maya Last Name: Kelty

Email Address: mkelty@3degreesinc.com

Affiliation: 3Degrees

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/70-lcfs-wkshp-dec21-ws-

BjUCYFcJBDtWMwFn.pdf

Original File Name: 3D_LCFS_Jan2022.pdf

Date and Time Comment Was Submitted: 2022-01-07 12:37:53

Comment 44 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ira Last Name: Dassa

Email Address: idassa@airlines.org Affiliation: Airlines for America (A4A)

Subject: Input on the December 7 Workshop on Potential Future LCFS Changes

Comment:

Attached are comments from A4A.

Attachment: www.arb.ca.gov/lists/com-attach/71-lcfs-wkshp-dec21-ws-VzZTYV09BAhWMwZp.pdf

Original File Name: A4A Comments on Potential Future Changes to the LCFS Program-FINAL-filed-1-7-2022.pdf

Date and Time Comment Was Submitted: 2022-01-07 12:41:28

Comment 45 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Bonnie Last Name: Trowbridge

Email Address: btrowbridge@zeemsolutions.com Affiliation: Director of Policy and Communications

Subject: Zeem Solutions Potential Future Changes to LCFS: EER Ratio

Comment:

Please see attachment.

Attachment: www.arb.ca.gov/lists/com-attach/72-lcfs-wkshp-dec21-ws-USsHZFA0BzkAdVQ7.pdf

Original File Name: ZeemSolutions_LCFS_comments_01.07.21.pdf

Date and Time Comment Was Submitted: 2022-01-07 12:54:34

Comment 46 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Thad Last Name: Kurowski

Email Address: tkurowski@tesla.com

Affiliation: Tesla

Subject: Tesla Potential Future Changes to the LCFS Program Public Workshop

Comment:

Tesla respectfully submits these brief, non-exhaustive, comments responsive to the California Air Resources Board's (CARB) staff presentation at the December 7, 2021, Potential Future Changes to the LCFS Program Public Workshop.

Attachment: www.arb.ca.gov/lists/com-attach/74-lcfs-wkshp-dec21-ws-VWcFMlJjWTsANlNk.pdf

Original File Name: 210107 FINAL Tesla CARB LCFS Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 12:54:09

Comment 47 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Adam Last Name: Voskuil

Email Address: avoskuil@midwestadvocates.org Affiliation: Midwest Environmental Advocates

Subject: MEA Comments on Necessary Changes to CARB LCFS

Comment:

We submit these comments urging CARB to revise the manure and biodigester lifecycle accounting or otherwise adjust the program to avoid supporting an extractive industry that harms and negatively impacts rural communities across the United States.

Complete comments are attached as a PDF.

Attachment: www.arb.ca.gov/lists/com-attach/75-lcfs-wkshp-dec21-ws-ADJQZlxvBGUHLAU1.pdf

Original File Name: 2022-01-07 MEA CARB Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:21:09

Comment 48 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Adam Last Name: Voskuil

Email Address: avoskuil@midwestadvocates.org Affiliation: Midwest Environmental Advocates

Subject: MEA Comments on Necessary Changes to CARB LCFS

Comment:

We submit these comments urging CARB to revise the manure and biodigester lifecycle accounting or otherwise adjust the program to avoid supporting an extractive industry that harms and negatively impacts rural communities across the United States.

Complete comments are attached as a PDF.

Attachment: www.arb.ca.gov/lists/com-attach/76-lcfs-wkshp-dec21-ws-ADJcalJhUzJRegMz.pdf

Original File Name: 2022-01-07 MEA CARB Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:21:09

Comment 49 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Terry Last Name: O'Day

Email Address: terry.oday@inchargeus.com

Affiliation: In-Charge Energy

Subject: Include Fast Charging Infrastructure

Comment:

Extending the Fast Charging Infrastructure (FCI) pathway to specifically support battery electric trucks is critical. Truck charging infrastructure needs to be scaled urgently in order to support the deployment of heavy duty vehicles. We are seeing many fleets introducing electric trucks that will benefit from this approach. The economic concepts behind FCI, which has been utilized almost exclusively for light duty vehicle applications, are evident in the heavy duty vehicle market. The enhancement of HRI / FCI to support heavy duty vehicle refueling is only logical in conjunction as these two critical zero emission fuel sources need infrastructure to scale in order to meet California's zero emission transportation mandates.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2022-01-07 13:27:43

Comment 50 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Daniel Last Name: Witt

Email Address: DanielWitt@lucidmotors.com

Affiliation: Lucid Motors

Subject: Lucid Motors LCFS workshop comments

Comment:

Comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/78-lcfs-wkshp-dec21-ws-

BmpSIQFjAjgGZAZZ.pdf

Original File Name: Lucid Motors_LCFS Workshop Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:36:16

Comment 51 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Lori Last Name: Taylor

Email Address: lori.taylor@valero.com

Affiliation:

Subject: Potential Changes to LCFS - Valero Comment Letter

Comment:

Valero hereby submits the attached comment letter regarding potential changes to CARB's LCFS program.

Attachment: www.arb.ca.gov/lists/com-attach/79-lcfs-wkshp-dec21-ws-Wy1XMF0wVGIGcglm.pdf

Original File Name: Valero Comments-LCFS Workshop 01072022 FINAL.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:42:58

Comment 52 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Brian Last Name: McDonald

Email Address: bcmcdonald@marathonpetroleum.com

Affiliation: MPC

Subject: Comments to LCFS workshop

Comment:

MPC Comments to LCFS Workshop

Attachment: www.arb.ca.gov/lists/com-attach/80-lcfs-wkshp-dec 21-ws-dec 21

BWhUIgdlVFgEYQBv.pdf

Original File Name: MPC comments _ 12.7.21 CARB LCFS Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:42:22

Comment 53 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Nicholas Last Name: Connell

Email Address: nconnell@ghcoalition.org Affiliation: Green Hydrogen Coalition

Subject: GHC Comments on CARB's Public Workshop - Potential Future Changes to the LCFS

Program Comment:

N/A

Attachment: www.arb.ca.gov/lists/com-attach/81-lcfs-wkshp-dec21-ws-UmBVY1VmUzJSeQIy.pdf

Original File Name: 2022-01-07 GHC Comments on CARB's Public Workshop - Potential

Future Changes to the LCFS Program.pdf

Date and Time Comment Was Submitted: 2022-01-07 13:59:59

Comment 54 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Thomas Last Name: Spangler

Email Address: thomas@cleanbayrenewables.com

Affiliation:

Subject: AgLand Renewables Comments on LCFS Workshop

Comment:

See attached letter.

Attachment: www.arb.ca.gov/lists/com-attach/82-lcfs-wkshp-dec21-ws-WjtUNQRpUWMCalA0.pdf

Original File Name: AgLand LCFS Letter_Jan 2022_FINAL.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:01:19

Comment 55 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jeremy Last Name: Martin

Email Address: jmartin@ucsusa.org

Affiliation: Union of Concerned Scientists

Subject: Lipid feedstock safeguard

Comment:

Please see the attached memo on the need for a lipid feedstock safeguard mechanism.

Attachment: www.arb.ca.gov/lists/com-attach/83-lcfs-wkshp-dec21-ws-UyZRNAR2UV1QOgVs.pdf

Original File Name: UCS Lipid feedstock constraint memo.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:07:59

Comment 56 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Aaron Last Name: Gillmore

Email Address: aaron.gillmore@waveipt.com

Affiliation: WAVE

Subject: WAVE comments regarding potential changes to the Low Carbon Fuel Standard

Program Comment:

Thank you for the opportunity to comment. Please let us know if you have any questions regarding our thoughts. - Aaron Gillmore, WAVE CEO

Attachment: www.arb.ca.gov/lists/com-attach/84-lcfs-wkshp-dec21-ws-B3BWMVUiADYDWgNv.pdf

Original File Name: WAVE LCFS Comment Letter.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:08:43

Comment 57 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Katherine (Kim)

Last Name: Oster

Email Address: kim.oster@forummobility.com

Affiliation: Forum Mobility

Subject: Comments on the Potential Future Changes to the LCFS Program

Comment:

Thank you for the creation of this program and the continued improvements CARB is making to the LCFS Program. With ${\sim}6,000$ trucks coming off the drayage registry in the next 3 years, that must be replaced by ZEVs, a strong LCFS is crucial for attracting the investment necessary to build the needed charging infrastructure.

Getting the details right on this LCFS program will accelerate the adoption of EV heavy-diesel trucks that are poised to grow exponentially just as we are witnessing in the EV passenger and small truck market.

To this end, we recommend several important improvements to the program:

1. Allow heavy duty trucks to qualify for the Fast-Charging Incentive Program. The importance of this program for heavy duty vehicles can't be overstated as it has proven necessary to bringing in the capital to finance the heavy-duty charging stations as the FCI program provides downside protection on the investment. Furthermore, Governor Brown's Executive Order B-48-18 (see below) calls for putting "zero emission" vehicles on the road which includes all vehicles, including heavy-duty trucks.

Unlike commercial vehicle charging stations that can be installed at a store, heavy duty vehicles will need dedicated sites for charging. We ask that the cost of the land be included in the capital expenditures paid back through the FCI program. Lastly, recommend that the associated solar and storage integral to the charging stations be considered as well.

- 2. Support extending LCFS beyond 2030. Investors time horizon for analyzing such investments extends beyond the current end of the LCFS program. Clearly laying out the declining LCFS requirements beyond 2030 will allow investors to amortize the costs of electric trucks and infrastructure over a longer time horizon, thereby lowering the costs in the short term. Lowering the costs will also help to accelerate the adoption of EVs.
- 3. Support strengthening pre-2030 targets for LCFS. This will send market signal to attract the needed private investment in transportation decarbonization. We believe the program should prioritize and/or provide more value to project/vehicles located in the state.

4.	Support	spec	cifyi	ng EE	R cl	assi	ifica	tion	between	medium	and	
heavy-duty (diesel replacement) applications. This will spur												
inv	estment	s in	vehi	cles	that	cre	eate	the	greatest	decarbo	nization	in
ali	gnment	with	the	goals	of	the	LCFS	pro	gram.			

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2022-01-07 14:40:05

Comment 58 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Scott Last Name: Lewis

Email Address: cmacintosh@ajw-inc.com

Affiliation: World Energy

Subject: World Energy Comments on Potential Changes to the LCFS

Comment:

Please see attached for our comments.

Attachment: www.arb.ca.gov/lists/com-attach/86-lcfs-wkshp-dec21-ws-AHddNFckUm1XNQlW.pdf

Original File Name: World Energy Comments on the Public Workshop on Potential Future Changes to the LCFS.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:45:59

Comment 59 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Kathy Last Name: Bergren

Email Address: cmacintosh@ajw-inc.com

Affiliation: NCGA

Subject: NCGA Comments on Potential Changes to the LCFS

Comment:

Please see attached for our comments.

Attachment: www.arb.ca.gov/lists/com-attach/87-lcfs-wkshp-dec 21-ws-lists/com-attach/87-lcfs-wkshp-dec 21-ws-lists/co

UWNdaVxtAGIHMQk+.pdf

Original File Name: 220107 NCGA LCFS 12 7 21 Workshop Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:47:54

Comment 60 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Angela Last Name: Richards

Email Address: arichards@monarchtractor.com

Affiliation: Monarch Tractor

Subject: Updated EER values should include electric tractors

Comment:

Please find our comment letter attached, thank you.

Attachment: www.arb.ca.gov/lists/com-attach/88-lcfs-wkshp-dec21-ws-

AG1WPwBvU2FRJVQ3.pdf

Original File Name: Monarch_Tractor_Comment_Letter.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:49:17

Comment 61 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jim Last Name: Verburg

Email Address: jverburg@wspa.org

Affiliation: WSPA

Subject: WSPA Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/89-lcfs-wkshp-dec21-ws-VyAHclEgV2VRCAFi.pdf

Original File Name: WSPA CA LCFS 12_7_2021 Workshop Comment Letter.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:57:43

Comment 62 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Kevin Last Name: McCrackin

Email Address: kmccrackin@chpk.com

Affiliation:

Subject: CUC & Kiewit Letter re Potential LCFS Changes 01.07.22

Comment:

See attached

Attachment: www.arb.ca.gov/lists/com-attach/90-lcfs-wkshp-dec21-ws-AWIGdQNhWFQHalM6.pdf

Original File Name: CUC Kiewit Letter to CARB RE LCFS Change 01.07.22.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:57:57

Comment 63 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Sam Last Name: Wade

Email Address: sam@rngcoalition.com

Affiliation: Coalition for Renewable Natural Gas

Subject: RNG Coalition Comments on December 2021 LCFS Workshop

Comment:

Please find our comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/91-lcfs-wkshp-dec21-ws-BTdWYldmUDIEMgE2.pdf

Original File Name: 220107 RNG Coalition LCFS Workshop Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:57:27

Comment 64 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Leticia Last Name: Phillips

Email Address: leticia@unica.com.br

Affiliation: UNICA - Brazilian Sugarcane Industry Ass

Subject: UNICA comments to LCFS December 07 2021 Workshop

Comment:

Dear CARB Staff, please see attached UNICA's COmments on the December 7, 2021 Workshop on Potential Future Changes to the LCFS Program.

We look forward to engaging with you on this issue.

Best regard,

Leticia Phillips

Representative - North America

UNICA

Attachment: www.arb.ca.gov/lists/com-attach/92-lcfs-wkshp-dec21-ws-VSBSOlQ8AjICZVIN.pdf

Original File Name: UNICA Comments on 120221 Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:58:13

Comment 65 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Michael Last Name: Wheeler

Email Address: michael.wheeler@intersectpower.com

Affiliation: Intersect Power

Subject: Support for Book and Claim Methodology for Zero Carbon H2

Comment:

Dear Dr. Laskowski,
Thank you for the opportunity to submit comments on this LCFS rulemaking. As a leader in development of true zero-carbon H2 production, Intersect Power looks forward to participating further in discussing the details of these important topics.

Best regards,

Michael Wheeler

Attachment: www.arb.ca.gov/lists/com-attach/93-lcfs-wkshp-dec21-ws-WjZcOQBnAiJRCFAz.pdf

Original File Name: LCFS Comments_IP_010722.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:56:45

Comment 66 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Yaniv Last Name: Lewis

Email Address: yaniv.lewis@srectrade.com

Affiliation: SRECTrade

Subject: SRECTrade LCFS Future Changes Comments

Comment:

See file attached.

Attachment: www.arb.ca.gov/lists/com-attach/94-lcfs-wkshp-dec21-ws-AHMBdQNnADBRIwV3.pdf

Original File Name: SRECTrade Comments to CARB_LCFS Workshop FINAL SIGNED.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:01:50

Comment 67 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Leticia Last Name: Phillips

Email Address: leticia@unica.com.br

Affiliation: UNICA - Brazilian Sugarcane Industry Ass

Subject: UNICA comments LCFS 120721 workshop

Comment:

Dear CARB Staff, please see attached UNICA's comments on the December 7, 2021 Workshop on Potential Future Changes to the LCFS Program. This is a resubmit with the correct name/ date of the file. Please consider this version of the file for your comment log. Thank you!

Leticia Phillips Representative - North America UNICA

Attachment: www.arb.ca.gov/lists/com-attach/95-lcfs-wkshp-dec21-ws-AXQFbQFpAjIKbQJd.pdf

Original File Name: UNICA Comments on 120721 Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 14:58:13

Comment 68 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

This comment was posted then deleted because it was unrelated to the Workshop item or it was a duplicate.

Comment 69 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Michael Last Name: Boccadoro

Email Address: mboccadoro@westcoastadvisors.com

Affiliation:

Subject: Dairy Cares Comments on the Recent LCFS Workshop

Comment:

Please see comments attached. Third attempt. Thank you!

Attachment: www.arb.ca.gov/lists/com-attach/98-lcfs-wkshp-dec21-ws-UjZSNVE5VncCfQFe.pdf

Original File Name: Dairy Cares Comments on 12-7-21 LCFS Workshop 220107 (00565669-2xBA8E1).pdf

Date and Time Comment Was Submitted: 2022-01-07 15:22:53

Comment 70 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Wesley Last Name: Lien

Email Address: wes@hcycle.com

Affiliation:

Subject: RE: Low Carbon Fuel Standard Public Workshop: Potential Future Changes to the

LCFS Program Comment:

Please see attached.

Attachment: www.arb.ca.gov/lists/com-attach/100-lcfs-wkshp-dec21-ws-VT0AWVw+VX9VMAhk.pdf

Original File Name: H Cycle_CARB LCFS Program Changes_Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:37:53

Comment 71 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Lisa Last Name: Whelan

Email Address: lisa@iowacci.org

Affiliation:

Subject: Amend the LCFS to Exclude Fuel from Dairy and Hog Manure

Comment:

See attachment.

Attachment: www.arb.ca.gov/lists/com-attach/101-lcfs-wkshp-dec 21-ws-UmBSZFdkVDZSelNi.pdf

Original File Name: 2021.12.17 CCI comment letter - CA LCFS.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:39:46

Comment 72 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Jon

Last Name: Costantino

Email Address: jon@tradesmanadvisors.com

Affiliation:

Subject: LCFS Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/102-lcfs-wkshp-dec21-ws-

AHQGclU1VWJRMlQn.pdf

Original File Name: Tradesman LCFS Letter 1-7-22.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:42:11

Comment 73 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Brady

Last Name: Van Engelen

Email Address: brady.vanengelen@bloomenergy.com

Affiliation: Bloom Energy

Subject: Bloom Energy - LCFS Workshop Comments

Comment:

12/07 LCFS Workshop Comments from Bloom Energy are attached.

Attachment: www.arb.ca.gov/lists/com-attach/103-lcfs-wkshp-dec21-ws-

BWdQOgBuU29SOQhX.pdf

Original File Name: Bloom Energy LCFS Workshop Comments (010722).pdf

Date and Time Comment Was Submitted: 2022-01-07 15:42:29

Comment 74 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Elise Last Name: Miller

Email Address: emiller@actcommodities.com

Affiliation: ACT Commodities

Subject: Comments

Comment:

Comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/104-lcfs-wkshp-dec 21-ws-dec 2

UjMAZQN2BwtWM1c4.pdf

Original File Name: ACT Commodities - LCFS Workshop Comments 01.07.22.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:48:10

Comment 75 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Elise Last Name: Miller

Email Address: emiller@actcommodities.com

Affiliation: ACT Commodities

Subject: Comments

Comment:

Comments attached.

Attachment: www.arb.ca.gov/lists/com-attach/105-lcfs-wkshp-dec21-ws-UDFUMQdyV1tRNAlm.pdf

Original File Name: ACT Commodities - LCFS Workshop Comments 01.07.22.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:48:10

Comment 76 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Matthew Last Name: Nelson

Email Address: Matthew.Nelson@electrifyamerica.com

Affiliation: Electrify America

Subject: LCFS Workshop Comments

Comment:

Please find Electrify America's comment letter attached. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/106-lcfs-wkshp-dec21-ws-

Wz4AalQwV2dVJ1Ig.pdf

Original File Name: Electrify America - LCFS Comments.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:54:03

Comment 77 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Carolyn Last Name: Berninger

Email Address: cberninger@gpisd.net Affiliation: The Great Plains Institute

Subject: Public Comment in Response to December 7 Public Workshop

Comment:

Please accept the attached comment from members of the Midwestern Clean Fuels Initiative's Farm Greenhouse Gas Accounting Committee in response to the California Air Resources Board's December 7, 2021, public workshop.

Attachment: www.arb.ca.gov/lists/com-attach/107-lcfs-wkshp-dec21-ws-AnFVJlEgUHMLYgR2.pdf

Original File Name: Supporting Climate-Smart Farming Practices through Midwestern Clean Fuels Policies.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:53:47

Comment 78 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Tyler Last Name: Lobdell

Email Address: tlobdell@fwwatch.org Affiliation: Food & Water Watch

Subject: LCFS Potential Changes Workshop Comments

Comment:

Please find our comments attached. This is a duplicate submission because I did not receive a confirmation of receipt from my attempt to submit these comments this morning (Jan. 7). Please contact me if you have any issues with the attachment. Thank you.

Attachment: www.arb.ca.gov/lists/com-attach/108-lcfs-wkshp-dec21-ws-ADIHMV1uB2YBKVRk.pdf

Original File Name: 2022.01.07_LCFS Workshop Cmts_Final.pdf

Date and Time Comment Was Submitted: 2022-01-07 15:56:04

Comment 79 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Nina Last Name: Robertson

Email Address: nrobertson@earthjustice.org

Affiliation: Earthjustice

Subject: Comments on the December 7, 2021 Public Workshop on LCFS

Comment:

Please see attached Earthjustice's comments the Public Workshop to Discuss Potential Future Changes to the LCFS Program.

Attachment: www.arb.ca.gov/lists/com-attach/109-lcfs-wkshp-dec21-ws-VWdRZ1JhAGFXfAU1.pdf

Original File Name: 2022-0107-Earthjustice-LCFS comments-FINAL.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:02:28

Comment 80 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Matthew Last Name: Rutherford

Email Address: mrutherford@peninsulacleanenergy.com

Affiliation:

Subject: Joint CCA Comments on Potential Future Changes to the LCFS Program

Comment:

Please see attached the comments of the Joint CCAs on potential future changes to the LCFS program.

Attachment: www.arb.ca.gov/lists/com-attach/110-lcfs-wkshp-dec21-ws-UjFSO1Q4VmhXNFU7.pdf

Original File Name: Comments of the Joint CCAs on Potential Future Changes to the LCFS Program_20220107.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:05:00

Comment 81 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Ashley

Last Name: Patterson Beaty

Email Address: ashley.beaty@btr.energy

Affiliation: BTR Energy

Subject: Potential Future Changes to the LCFS Program

Comment:

See attached comments submitted by BTR Energy

Attachment: www.arb.ca.gov/lists/com-attach/111-lcfs-wkshp-dec21-ws-

BWdTIQNwWVUHZANt.pdf

Original File Name: BTR Energy CARB LCFS Future Regulatory Changes 01072022.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:05:04

Comment 82 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Brandon Last Name: Price

Email Address: brandon@maasenergy.com Affiliation: Maas Energy Works, Inc.

Subject: MEW Comments to CARB 12/7/2021 LCFS Workshop

Comment:

Please find Maas Energy Works, Inc.'s comments to the 12/7/2021 LCFS Workshop attached.

Attachment: www.arb.ca.gov/lists/com-attach/112-lcfs-wkshp-dec21-ws-VTgAYwdxAg4AZQRl.pdf

Original File Name: MEW CARB December 2021 LCFS Workshop Comments Final.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:14:47

Comment 83 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Evan Last Name: Neyland

Email Address: evan.neyland@chargepoint.com

Affiliation: ChargePoint

Subject: Comments on Dec 7 Public Workshop re: Potential Changes to the LCFS

Comment:

ChargePoint appreciates the work the California Air Resources Board (CARB) does developing, amending, and managing the Low Carbon Fuel Standard (LCFS) and the opportunity to participate in the public feedback process. ChargePoint is a world leading electric vehicle (EV) charging network, providing scalable solutions for every charging scenario from home and multifamily to workplace, parking, hospitality, retail and transport fleets of all types. Today, one ChargePoint account provides access to hundreds of thousands of places to charge in North America and Europe. ChargePoint is a participant under the California and Oregon LCFS programs and has collaborated in LCFS rulemakings in Washington, Oregon, British Columbia, Canada, and Germany.

ChargePoint would like to provide the following comments in response to the potential future changes to the LCFS raised by CARB in the December 7 Public Workshop.

Incentivize investment and align with long-term climate goals:

ChargePoint supports CARB's goal of incentivizing investment and aligning with California's long-term climate goals. To achieve this goal, no single amendment to the LCFS will do more to further these goals than accelerating the pre-2030 carbon intensity (CI) target and strengthening and extending the post-2030 target. To date, the LCFS has proven extremely successful at incentivizing innovation and investment in low carbon transportation fuels: the amount of non-ethanol low-carbon fuel delivered to California's transportation fuel market has increased by nearly 2,000% since 2011 (electricity as a transportation fuel has increased by over 150,000% under the LCFS) and when factoring in the supply pipeline, California is well on its way to achieving the 2030 CI target under the program. As a result, many market participants now have a bearish sentiment on future credit prices which stifles marginal investment in low-carbon fuel and additional emissions reductions. In the case of electric vehicle (EV) charging, near term investments are critical to continue the expansion of charging infrastructure and accommodate the rapid growth of both personal and commercial EVs, particularly trucks and SUVs. By amending and accelerating the pre-2030 CI target and strengthening and extending the post-2030 target, CARB could better align the LCFS targets with California's long-term climate goals and create the investor confidence needed to incentivize the next wave of investment and move California closer to its mid-century net-neutrality goal. If CARB is unable to immediately amend the CI schedule, signaling its intent to do so would improve investor sentiment and bring more

low-carbon fuel and infrastructure to market.

Accelerate transition to ZEVs:

As it relates to leveraging the LCFS to accelerate the transition to zero emissions vehicles (ZEVs), if CARB is considering extending the hydrogen refueling infrastructure (HRI) crediting provision to medium and heavy-duty vehicles (M/HDV) then CARB should extend the fast-charging infrastructure (FCI) provision to M/HDV as well. Electrification in the M/HDV segment is happening and as production scales and more vehicle models become available there will be a need for non-depot charging infrastructure to serve these fleets and mitigate fleet owners' risk of stranding vehicles in-route. The FCI provisions currently in place for light duty vehicles (LDV) have proven very effective at de-risking and attracting significant investment in LDV direct current fast charging (DCFC) and the same can be expected for M/HDV. ChargePoint also supports exploring how to incentivize more investment in battery storage under the LCFS and while we do not have specific proposals to lay out at this time, we support holding technical workshops and gathering more stakeholder feedback to inform potential mechanisms

Along with extending the FCI provisions to M/HDV, CARB could help accelerate the transition to ZEVs under the LCFS by exploring ways of increasing the rebate amount under the Clean Fuels Reward program so that the value received by drivers is a higher percent of the average lifetime value of a single EV under the program. For example, assuming a passenger EV driver charges roughly 750 kWh per quarter at home, the statewide electricity CI declines at a modest rate of 3% per year, and credit prices start at \$145 and slowly decline thereafter, the 10-year lifetime value of the residential base credits equals approximately \$3,000. At \$750, the Clean Fuels Reward rebate makes up only a quarter of this value. Acknowledging that credit prices fluctuate and may decline faster and cashflows must be sustained, we would encourage CARB to explore ways, potentially through a partner such as a green bank, of increasing the rebate amount to drivers so as to more accurately reflect the lifetime value of home charging under the program. This should help accelerate EV adoption and gasoline displacement in the state.

Finally, we propose that CARB recategorize "multi-family" charging as non-residential under the LCFS to amplify the incentive for multi-family apartment developers to install charging infrastructure at multi-family home properties. This would give multi-family apartment developers more agency in the ability to recoup infrastructure costs and should accelerate investment in the segment. Residences of multi-family apartments would still be eligible for the Clean Fuels Reward and would be more likely to have access to home charging, increasing the likelihood these drivers will switch to electric. This small change to the program may also go a long way in helping transportation network companies to electrify, as mandated under the California Clean Miles Standard.

Streamline implementation and enhance exportability:

ChargePoint is active across several North American coalitions to help stand up LCFS programs and we appreciate CARB lending its learnings and support to these jurisdictions.

We would express initial support for CARB to develop a single CI benchmark table for primary obligated and opt-in fuels under an

LCFS to ease the lifecycle assessment burden on outside jurisdictions. This may be of particular use to smaller states considering adopting the LCFS. In doing so, CARB could consider making the model assumptions behind each CI calculation transparent and easy to adjust in case other jurisdictions see fit to make changes that may better reflect local emissions factors.

Thank you for considering our feedback. We look forward to continuing to participate in the public feedback process.

Attachment: www.arb.ca.gov/lists/com-attach/113-lcfs-wkshp-dec21-ws-VDcGaFY2V3YEZQls.pdf

Original File Name: ChargePoint Comments to Dec 7 CARB LCFS Public Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:22:21

Comment 84 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Adam Last Name: Mohabbat

Email Address: adam.mohabbat@evgo.com

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/115-lcfs-wkshp-dec21-ws-lists/com-attach/115-lcfs-wkshp-dec21-wks-lists/com-attach/115-lcfs-wkshp-dec21-ws-lists/com-attach/115-lcfs-wkshp-dec21-ws-lists/com-attach/115-lcfs-wkshp-dec21-wks-lists/com-attach/115-lcfs-wkshp-dec21-wks-lists/com-attach/115-lcfs-wks-lists/com-attach/115-lcfs-wks-lists/com-attach/115-lcfs-wks-lists/com-attach/115-lcfs-wks-lists/co

BWAAcAdhU29QCQJh.pdf

Original File Name: EVgo_CARB LCFS Comments_1.07.21.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:29:51

Comment 85 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Joshua Last Name: Kehoe

Email Address: kehoej1@gmail.com Affiliation: California resident

Subject: feedstock and refined product transportation

Comment:

Dear CARB personnel,

I appreciate the opportunity for California citizens such as myself to express our opinions regarding the LCFS program. The current and proposed growth in biomass-based diesel production in the United States will continue to have large effects on the feedstock markets used to produce the fuel. Federal and/or state legislation that would make sustainable aviation fuel economically viable will only add to the feedstock pressure. Additional greenhouse gas emissions from the transportation of feedstock and finished products are accounted for in GREET modeling, but given their relatively small contribution to the overall CI score, have incentivized transport of domestic feedstock to foreign refineries, which in turn transport the refined product back to the United States, largely California. Although within the letter of the law, this does somewhat go against the spirit of the law. Of course, petroleum markets are international as well, and subject to the same arbitrage calculations that lead to long crude oil and refined product voyages, so it is hard to pick on the liquid biofuel markets for this same behavior. It is unfortunate there was no way to fairly incorporate a "closer to home" factor in LCFS calculations to try and reduce the GHG emissions involved in transport of feedstock and refined product. A Federal LCFS-like program would likely allay this to some degree, but for the time being California will be the main product market. Again, thank you for the opportunity to comment.

Sincerely, Josh Kehoe

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2022-01-07 16:15:44

Comment 86 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Michael Last Name: Walz

Email Address: michael.walz@poet.com

Affiliation: POET, LLC

Subject: POET Comments to LCFS Workshop on 12/07/2021

Comment:

Attached please find POET's comments to CARB's workshop on potential changes to the LCFS held on 12/07/2021.

Attachment: www.arb.ca.gov/lists/com-attach/117-lcfs-wkshp-dec21-ws-U2NVYIV6VzQHNld5.pdf

Original File Name: 01.07.2022 POET LCFS Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:28:03

Comment 87 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Thomas Last Name: Hobby

Email Address: tom.hobby@yosemiteclean.com

Affiliation: Yosemite Clean Energy LLC

Subject: CARB - Rulemaking Comments from Yosemite Clean Energy

Comment:

Yosemite Clean Energy LLC (YCE) is developing biomass to carbon-negative green hydrogen and carbon negative renewable natural gas projects. Attached please find our comment to this rulemaking. We look forward to further engagement with CARB on these issues.

Attachment: www.arb.ca.gov/lists/com-attach/119-lcfs-wkshp-dec21-ws-AmFVMlwvU2JXfAVp.pdf

Original File Name: CARB-Letter-1-7-2022 CLN[3].pdf

Date and Time Comment Was Submitted: 2022-01-07 16:38:03

Comment 88 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Peter Last Name: Reinhardt

Email Address: peter@charmindustrial.com

Affiliation: Charm Industrial

Subject: /Charm Comments - CARB LCFS Workshop on 12/07/2021

Comment:

Attached is Charm's comments to the LCFS workshop held on 12/07/2021.

Attachment: www.arb.ca.gov/lists/com-attach/120-lcfs-wkshp-dec21-ws-AjIHMFN8BGdWZ1V7.pdf

Original File Name: 01.07.2021 Charm Comments to LCFS Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:39:16

Comment 89 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Evan Last Name: Rosenberg

Email Address: evan.rosenberg@srectrade.com

Affiliation:

Subject: Coalition of LCFS stakeholders in support of an API for LRT-CBTS

Comment:

Please find attached letter in support of implementing an API for the LRT-CBTS submitted by SRECTrade and co-signed by the following organizations:

Alameda-Contra Costa Transit District Anaheim Transportation Network California Department of General Services City of Porterville City of Santa Monica East Bay Clean Cities Coalition e-Mission Control EV Connect Idemitsu Apollo Corporation Mercuria Moreno Valley Electric Utility Peninsula Clean Energy Powerflex Systems Propel Fuels San Diego Metropolitan Transit System Santa Cruz Metro Skyview Ventures WattEV Zeem Solutionss

Attachment: www.arb.ca.gov/lists/com-attach/121-lcfs-wkshp-dec21-ws-VyRQJFw4UGAEdgZ0.pdf

Original File Name: SRECTrade Comments to CARB_LCFS Workshop_December 2021_FINAL.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:29:26

Comment 90 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Michelle Last Name: Orrock

Email Address: michelle.orrock@bp.com

Affiliation: bp America

Subject: Re: Public Workshop: Potential Future Changes to the LCFS Program

Comment:

Please see attached for our letter.

Attachment: www.arb.ca.gov/lists/com-attach/122-lcfs-wkshp-dec21-ws-dec21

Wjx UOw Bv U2 EB aw Bf. pdf

Original File Name: FINAL bp LCFS comments 1.7.22.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:43:29

Comment 91 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Neil Last Name: Koehler

Email Address: neil.koehler@kbe-llc.com Affiliation: Renewable Fuels Association

Subject: RFA comments on December 7, 2021 LCFS Workshop

Comment:

RFA comments attached

Attachment: www.arb.ca.gov/lists/com-attach/123-lcfs-wkshp-dec21-ws-

WihQMANjBwtXPVAz.pdf

Original File Name: RFA LCFS Workshop Comments-01-07-22.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:36:47

Comment 92 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Graham Last Name: Noyes

Email Address: graham@lcfcoalition.com Affiliation: Low Carbon Fuels Coalition

Subject: Recommendation to Integrate Farming Practices and Soil Carbon into LCFS Comment:

The attached letter contains principles developed by a broad group of industry stakeholders including farmers, low carbon fuel producers, non-governmental organizations, and trade associations.

We are recommending that the California Air Resources Board recognize farming practices and other methods of soil carbon sequestration into the Low Carbon Fuel Standard Rulemaking. Specifically, we are encouraging CARB to recognize SCS within the next iteration of the CA-GREET model that underlies the LCFS program.

Thank you for your consideration of these comments. We look forward to future engagement on this issue.

Best Regards,

Graham Noyes Low Carbon Fuels Coalition

Brendan Jordan Great Plains Institute

Brian Jennings American Coalition for Ethanol

Floyd Vergara National Biodiesel Board

Chris Vervaet Canadian Oilseed Processors Association

Attachment: www.arb.ca.gov/lists/com-attach/124-lcfs-wkshp-dec21-ws-UGcFXAZtADIFbVIN.pdf

Original File Name: 7 Jan 2022 Joint Soil Carbon Letter Final.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:46:08

Comment 93 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Rebecca Last Name: Baskins

Email Address: rbaskins@kscsacramento.com

Affiliation:

Subject: NBB and CABA Joint Comments

Comment:

Attached are joint comments from NBB and CABA regarding LCFS.

Attachment: www.arb.ca.gov/lists/com-attach/125-lcfs-wkshp-dec21-ws-

BWsCZlY1U18LbFM9.pdf

Original File Name: NBB and CABA Joint Comments 1.7.pdf

Date and Time Comment Was Submitted: 2022-01-07 16:55:02

Comment 94 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Matt Last Name: Richardson

Email Address: richardson034@gmail.com

Affiliation: CRP

Subject: No to Biodiesel!

Comment:

The carbon footprint for biodiesel is pretty high. It's NOT a bridge fuel. No breaks for biodiesel. Phase it out and spend \$\$ on electrification.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2022-01-07 16:54:29

Comment 95 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Graham Last Name: Noyes

Email Address: graham@noyeslawcorp.com Affiliation: Noyes Law Corporation For FS

Subject: FS Comment RE: Renewable Biomass Issues

Comment:

The attached letter is submitted on behalf of FS Agrisolutions Industria de Biocombustiveis Ltda (FS, Fueling Sustainability). It recommends that CARB study and recognize the role of renewable biomass as a source of low carbon intensity process energy.

Please contact me regarding any questions relating to the comment. Thank you for the opportunity to provide comments to the LCFS rulemaking process.

Best Regards,

Graham

Graham Noyes Noyes Law Corporation 401 Spring Street, Suite 205 Nevada City, CA 95959 www.fuelandcarbonlaw.com

Attachment: www.arb.ca.gov/lists/com-attach/127-lcfs-wkshp-dec21-ws-AGxWM1YxV3cLUIUn.pdf

Original File Name: LCFS Rulemaking Input_ Renewable Biomass Issues_FS_final.pdf

Date and Time Comment Was Submitted: 2022-01-07 17:00:50

Comment 96 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Graham Last Name: Noyes

Email Address: graham@noyeslawcorp.com

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/145-lcfs-wkshp-dec21-ws-Uj5dOF06VnYAWQZ0.pdf

Original File Name: LCFS Rulemaking Input- Second Crop Corn_FS_final (2).pdf

Date and Time Comment Was Submitted: 2022-01-10 15:58:31

Comment 97 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Stefan Last Name: Unnasch

Email Address: unnasch@lifecycleassociates.com

Affiliation:

Subject: LCFS Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/146-lcfs-wkshp-dec21-ws-

BmpRNFExV1sGLQhX.pdf

Original File Name: LCA_-_LCFS Comments Jan 2022 (1).pdf

Date and Time Comment Was Submitted: 2022-01-10 16:02:23

Comment 98 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Colin Last Name: Murphy

Email Address: cwmurphy@ucdavis.edu

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/148-lcfs-wkshp-dec21-ws-ViNVMAFkUFxQNVU6.pdf

Original File Name: UCD comments - CA LCFS 12 7 21 workshop.pdf

Date and Time Comment Was Submitted: 2022-01-10 16:11:32

Comment 99 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Frank Last Name: Harris

Email Address: fharris@cmua.org

Affiliation:

Subject: LCFS Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/149-lcfs-wkshp-dec21-ws-

VTYFbgdzAjBQCQlq.pdf

Original File Name: cmua_comments.pdf

Date and Time Comment Was Submitted: 2022-01-10 16:20:41

Comment 100 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Andrew Last Name: Craig

Email Address: acraig@calbioenergy.com

Affiliation:

Subject: Comments

Comment:

See attached,

Attachment: www.arb.ca.gov/lists/com-attach/150-lcfs-wkshp-dec 21-ws-dec 2

B2tTNlQzBydSCwJy.zip

Original File Name: LCFS_Public_Comments_-_failed_to_upload.zip

Date and Time Comment Was Submitted: 2022-01-10 16:22:56

Comment 101 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: John Last Name: O'Donnell

Email Address: jon@tradesmanadvisors.com

Affiliation: Rondo Energy

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/151-lcfs-wkshp-dec21-ws-dec21

ATNWYlFgBWcBNwA3.pdf

Original File Name: 220107 Rondo LCFS workshop comments (1).pdf

Date and Time Comment Was Submitted: 2022-01-10 16:26:49

Comment 102 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Rock Last Name: Zierman

Email Address: rock@cipa.org

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/153-lcfs-wkshp-dec 21-ws-dec 2

WjlRPlwtBDZVDAVh.pdf

Original File Name: CIPA December 2021 LCFS Comments -final (1).pdf

Date and Time Comment Was Submitted: 2022-01-10 16:30:40

Comment 103 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Tim Last Name: Gibbons

Email Address: timgibbons@morural.org

Affiliation:

Subject: Comments on LCFS Rulemaking Workshop; CARB Should Grant the LCFS

Rulemaking Petition

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/155-lcfs-wkshp-dec21-ws-VjsHcwNhU2MCW1Ix.pdf

Original File Name: MRCC Comments on LCFS Rulemaking Workshop.pdf

Date and Time Comment Was Submitted: 2022-01-11 10:39:19

Comment 104 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Eileen Last Name: Tutt

Email Address: Eileen@caletc.com

Affiliation:

Subject: CalETC's LCFS Dec Workshop Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/156-lcfs-wkshp-dec 21-ws-dec 2

AWJSNVwxUGYAcgJh.pdf

Original File Name: CalETC comment letter Jan 12 2022 on LCSF workshop Final.pdf

Date and Time Comment Was Submitted: 2022-01-13 09:54:10

Comment 105 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Sara Last Name: Fitzsimon

Email Address: sfitzsimon-nelson@californiahydrogen.org

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/157-lcfs-wkshp-dec21-ws-VDhUMVA3WHhRCAZ2.pdf

Original File Name: LCFS Potential Future Changes to the LCFS Program_CHBC.pdf

Date and Time Comment Was Submitted: 2022-01-25 12:52:20

Comment 106 for Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) - 1st Workshop.

First Name: Will Last Name: Brieger

Email Address: will.brieger@gmail.com

Affiliation:

Subject: Comments

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/159-lcfs-wkshp-dec 21-ws-lists/com-attach/159-lcfs-wkshp-dec 21-ws-l

UjFWP1Y6BzkEZwdp.docx

Original File Name: comments.docx

Date and Time Comment Was Submitted: 2022-03-17 13:35:31

There are no comments posted to Public Workshop to Discuss Potential Future Changes to the LCFS Program (lcfs-wkshp-dec21-ws) that were presented during the Workshop at this time.