



December 21, 2022

Cheryl Laskowski, Branch Chief
Low Carbon Fuel Standard Program
California Air Resources Board
1001 I St., Sacramento, CA 95814

Sent via email to LCFSworkshop@arb.ca.gov

Re: November 9 Workshop on Low Carbon Fuel Standard (LCFS) Amendments

Dear Ms. Laskowski:

The California Electric Transportation Coalition (CalETC) appreciates the opportunity to comment on the November 9, 2022, Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard (LCFS). CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors includes representatives from: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority, and the Northern California Power Agency. In addition to electric utilities, our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification. Please note that the views and comments reflected in this letter represent the positions of the CalETC board of directors and a some, but not all, of the members of CalETC.

These comments address our recommendations for the upcoming rulemaking based on issues covered in the workshop and are based on results from LCFS modeling tools. We appreciate staff agreeing to release the CATS model for public use and look forward to future LCFS workshops.

Over the past 10 years, the LCFS has been tremendously successful in supporting the transition from petroleum to cleaner transportation fuels including electricity fuel. Clean fuels have replaced petroleum and, in doing so, have reduced climate change pollutants as well as a myriad of air and toxic pollutants that adversely impact communities. The LCFS has served as a catalyst for billions of dollars of investments in clean fuels and infrastructure.

The most recent Intergovernmental Panel on Climate Change (IPCC) report along with countless studies cannot be clearer on what the science tells us; we must act decisively with an amplified focus on mitigation if we are to limit the most severe impacts of climate change—impacts that will be disproportionately borne by those least equipped to adapt. The Governor and the Legislature’s leadership to address the threat that climate change poses to the health of Californians and the

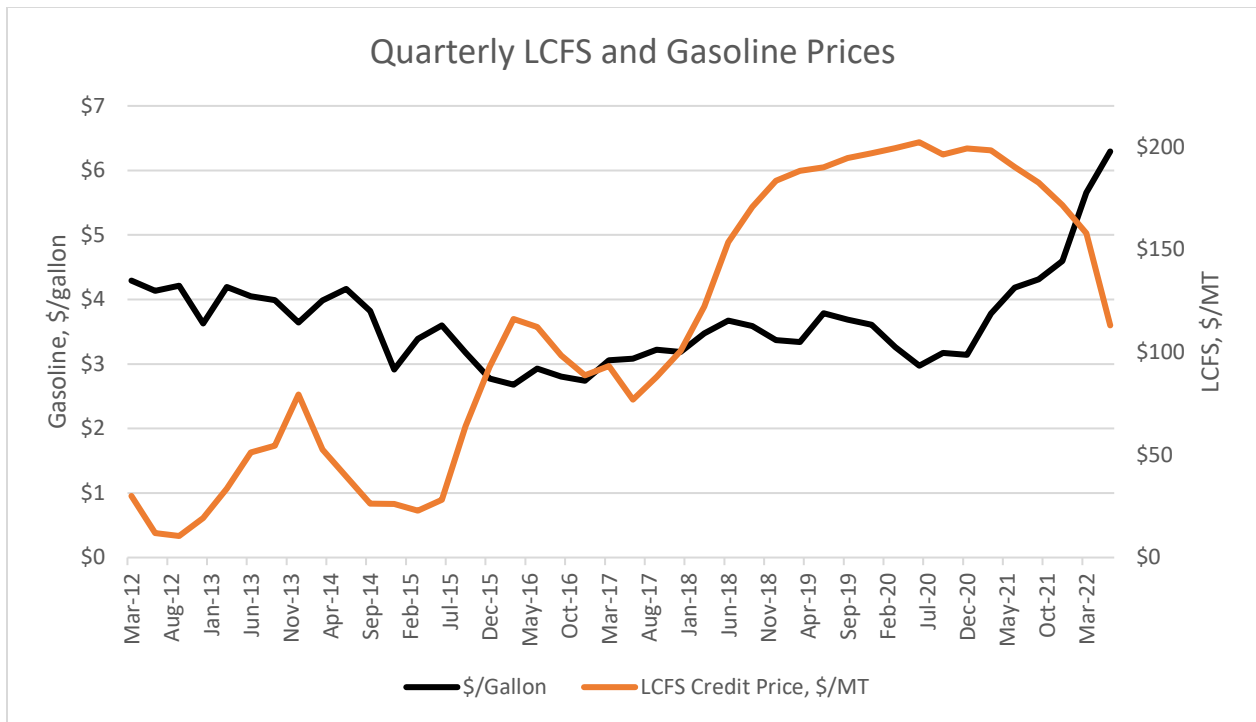
economy is emphatic and reflected in a series of actions including statutorily mandated greenhouse gas reduction targets and an unprecedented budget commitment eclipsing \$50 billion.

The 2022 update to the Scoping Plan is the state's response to the need for a holistic strategy to achieve legislatively mandated greenhouse gas reduction targets including achievement of carbon neutrality by 2045. The 2022 Scoping Plan is built on science and robust analysis, presenting an irrefutable case for ramped-up mitigation and public investment relying heavily on strengthening programs that have been effectively implemented for years. In short, there is no path to achieve the state's climate goals without strengthening the LCFS.

CalETC supports a minimum 30 percent reduction in carbon intensity by 2030. Currently the LCFS is underperforming, which is undermining investment in electric cars, trucks, buses and charging infrastructure, as well as infrastructure for other low-carbon fuels. Preliminary results from multiple models support increasing the stringency of the LCFS to a minimum 30 percent reduction in carbon intensity by 2030. It is essential that the stringency be increased expeditiously and be implemented by January 1, 2024, to ensure the LCFS continues to contribute substantially to the state's clean air, climate change, and zero-emission transportation goals.

While there are impacts to retail gasoline prices from LCFS compliance, the correlation between LCFS prices and gasoline prices is not nearly as significant as global macroeconomic factors that play a much larger role in price swings of this global commodity. The impact of increased LCFS stringency on gasoline prices does not appear to exist in the market reality, as some have suggested. This makes it difficult to determine how the regulated oil industry is responding to increased stringency in LCFS with respect to consumer pricing of gasoline and diesel. The graph below¹ does not show a direct, quantifiable link between quarterly LCFS prices and the price of gasoline. Further, as the current petroleum oligopoly faces competition from low-carbon fuels in the next decade, it is likely that any price impact between LCFS stringency and gasoline prices will be further muted.

¹ https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPM0_PTE_SCA_DPG&f=M;
<https://ww2.arb.ca.gov/resources/documents/weekly-lcfs-credit-transfer-activity-reports>



CalETC supports development of an acceleration mechanism. The LCFS includes several features designed to contain high costs for the petroleum industry by ensuring against potential shortages of credits. These features include:

- Unlimited banking
- No expiration date on credits
- Fungible use of credits to mitigate deficits irrespective of the deficit-generating fuel
- Credit clearance mechanism (CCM) with a price cap
- Mechanism to pull utility electric vehicle credits forward if the CCM is activated
- Ability to carry over deficits in the event credits are unavailable

From the LCFS program’s inception, minimal attention has been directed at effectively protecting clean fuel providers by providing some certainty and market stability against the potential for a market glut of LCFS credits and very low credit prices. Specifically, the results of the current program continue to stifle investment in electrification of the transportation sector, investment in charging infrastructure, and investment in all clean fuels. This is likely due to exceeding the carbon intensity (CI) reduction compliance targets resulting in a significantly reduced credit value and adding to a growing credit bank that now stands at over ten million credits. The historical response to market perturbation and glut of credits, which unfortunately means the full emission reduction benefits of the LCFS are not being realized, has been to implement amendments that increase the stringency of the program. However, anticipating the magnitude of innovation associated with developing progressively cleaner fuels and vehicles, like electricity fuel and electric vehicles, is exceedingly difficult. The market has consistently exceeded the CI reduction targets under the program and waiting for a new round of amendments has resulted in missed opportunities to reduce millions of tons of climate change pollutants and accelerate the transition to a zero-emission transportation future. In short, the problem is a suboptimal stringency requirement

without a timely mechanism to correct it resulting in suboptimal climate change and other pollutant reductions, investment in innovative solutions, and/or investment by low carbon fuel providers.

We propose that, in addition to tightening the stringency of the LCFS to achieve a minimum 30 percent reduction in the CI by 2030, CARB incorporate a mechanism into the regulation that dynamically responds in the event of future sustained and significant innovation supporting a rapid escalation in credit generation and low credit prices occurs, by further tightening the stringency. This mechanism would complement the minimum 30 percent stringency by 2030, enhance existing mechanisms to avoid credit shortfalls and price escalation, provide greater certainty for clean fuel providers and customers, and better ensure that opportunities to deliver additional reductions of climate change pollutants, traditional (e.g., ozone-forming pollutants, PM2.5) air pollutants, and toxic emissions are not foregone. CalETC calls this proposal the "acceleration mechanism" (in the November 9 workshop some called it the "self-adjusting" or "ratchet mechanism"). We believe that an acceleration mechanism can be developed that utilizes transparent metrics that trigger adjustments to the program's stringency and the necessary certainty for clean fuel providers to plan accordingly. An acceleration mechanism keeps innovation, investment, and emission reductions accelerating faster than they would otherwise. By incorporating a responsive acceleration mechanism into the regulation, the program will provide the market with a clearer signal that investments in clean fuels will be rewarded, and that California will not leave climate change pollutant reductions "on the table" in the future.

The CARB Board, with the credit clearance market and other features listed above, provided price and risk certainty to the oil industry. We believe that now is the time for CARB to adopt an acceleration mechanism, which would provide similar certainty to the low-carbon fuels industry, consumers, and society.

In response to comments made by staff in the November 9 workshop asking for more stakeholder feedback on the acceleration mechanism, CalETC provides several questions that must be explored and addressed in order for the acceleration mechanism to be developed and incorporated into the LCFS.

- How does the acceleration mechanism complement the effort to increase the stringency of the program?
- What metrics should be used to trigger the acceleration mechanism?
- What duration (e.g., number of quarters) of this metric (or metrics) triggers the acceleration mechanism?
- What is the magnitude of increased stringency if the acceleration mechanism is triggered?
- Should there be differing degrees of increased stringency in the event the acceleration mechanism is triggered?
- How and when will deficit and credit generators as well as other stakeholders be notified that the acceleration mechanism has been triggered?
- Are there potential perverse incentives associated with the acceleration mechanism concept and what are the options for mitigation?

- What guardrails could be established to provide certainty on the maximum impact of the acceleration mechanism?

CalETC is developing a detailed proposal for an acceleration mechanism for CARB's consideration as part of the 2023 amendments to the LCFS. We plan to submit the proposal to CARB in early 2023. Given the extensive public interest in this concept at the November 9 workshop, we encourage CARB to begin discussions on an acceleration mechanism concept as part of the pre-rulemaking public dialogue.

CalETC supports an immediate step down in stringency in 2024. CalETC recommends an immediate "step down" in stringency in 2024. The step down would deliver additional near-term pollutant reductions. This step down in 2024 and the acceleration mechanism would not replace the need for increasing the overall stringency of the program to a minimum of 30 percent reduction in CI by 2030. Rather, the stringency and step-down provisions would complement the increased compliance requirement on traditional high-carbon fuels industry both in the near- and mid-term.

CalETC supports including LCFS infrastructure capacity credits for medium- and heavy-duty zero-emission vehicle (ZEV) fueling through 2035. The ZEV infrastructure provision for medium- and heavy-duty vehicles should cover Direct Current (DC) Fast Charging Infrastructure (FCI) and Hydrogen Refueling Infrastructure (HRI). California has just started its journey to attain net zero emissions for the medium- and heavy-duty vehicle sector and the state needs to dramatically accelerate public access to the supporting fueling infrastructure. Medium- and heavy-duty vehicle and fleet operators need public access ZEV fueling infrastructure to be in place before committing to purchasing medium- and heavy-duty ZEVs. California's fueling infrastructure for both electricity and hydrogen should stay ahead of demand to ensure ZEV trucks can operate and fulfill duty cycles specific to their needs.

CalETC supports extending the current light-duty capacity credit program to align with Advanced Clean Car II (ACCII) goals for 2035. With the upcoming adoption of ACCII, California is dramatically accelerating the adoption of light-duty ZEVs. The State needs support ZEV infrastructure to meet the expanding need for DC fast charging and hydrogen stations. Allowing new applications for the existing light-duty FCI and HRI programs until 2035 will address the ambitious ACCII requirements for light-duty ZEVs.

CalETC opposes removing or limiting zero-emission forklifts from the LCFS. CalETC does not support removing or limiting LCFS eligibility for forklifts or any technology or fuel that meets the eligibility criteria for generating credits. CARB indicated the new criteria used to support removing forklifts is that electricity to power forklifts is a mature fuel. If CARB were to remove all mature fuels from LCFS eligibility, then almost all fuels and technologies currently generating LCFS credits would be removed from eligibility. Should CARB determine new criteria for removal of a fuel or technology from LCFS eligibility, that criteria should be transparent and approved by the CARB Board. CalETC supports the current criteria, CI and ILUC, and does not support changing, adding, or eliminating criteria at this time.

CalETC supports expanding LCFS to new ZEV sectors. We support expanding LCFS to include new types of ZEV transportation fuels (e.g., sea and air transport fuels). The Low Carbon Fuel Standard is a successful tool for accelerating the market for ZEVs and should be expanded to include all ZEVs given the climate crisis and the state's very ambitious regulations.

Thank you for considering our comments and we look forward to working with CARB staff on this issue.

Regards,

A handwritten signature in black ink, appearing to read 'LR', with a long horizontal flourish extending to the right.

Laura Renger, Executive Director
California Electric Transportation Coalition

cc: Chair Randolph
CARB Board Members
Rajinder Sahota
Matthew Botill
Jordan Ramalingam
Rachel Conners
Jacob Englander