

April 23, 2018

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**Subject: EDF Comments on the California Low Carbon Fuel Standard**

Dear Members of the Air Resources Board,

Please accept these comments from Environmental Defense Fund in support of the continued implementation and appropriate modification of the California Low Carbon Fuel Standard (LCFS) regulation. As a direct result of the LCFS working in concert with other state policies on transportation fuels and vehicles, California is leading the world in the effort to establish commercially-viable fuel options that will contribute to lower greenhouse gas (GHG) emissions from transportation. We encourage the California Air Resources Board (CARB) to continue the LCFS, extend its reach and breadth, and strengthen the program in ways that will accelerate investments in this sector for years to come.

EDF is a national non-profit organization that focuses on developing solutions to some of the planet's most pressing environmental problems. By harnessing the power of strong science and economic signals, EDF develops and supports policies that create durable solutions which drive innovation and investment. The California LCFS, a market-based program that provides a flexible, performance-based framework for investment in alternative fuels is a key example of the opportunities that this approach provides. For example, although early models did not anticipate the mix of fuels that would achieve today's program compliance, the underlying design and market signal created through the program led to advancements across the fuel spectrum, and will continue to do so for years to come.

In response to the proposed modifications of the LCFS being considered by the Board, EDF offers the following comments on the proposed program modification and readoption.

**Extension and increased stringency of the program**

EDF fully supports extending the LCFS program to attain reductions from the fuel sector past 2020 and believes that continuing the LCFS policy with more stringent targets is imminently achievable. As documented by Dr. Chris Malins in a recent report sponsored by the NextGen Policy Center, the Union of Concerned Scientists and CERES, compliance with the LCFS is achievable at even lower carbon intensity targets than previously assumed due to the growing availability of low carbon options in fuel production and use. Therefore, while year-over-year compliance targets in the rule continue to be (and should be) the subject of review, it is clear that lower carbon intensity targets can be achieved and the use of mechanisms in the LCFS to inspire and reward investments across the fuel production, transportation, delivery, and use value chain will be increasingly important and make compliance by fuel providers increasingly attainable. For example, through the development and use of tools such as a cost control mechanism, carbon capture and storage (CCS) protocol, refinery investment crediting opportunity and electric vehicle crediting refinements, long-term compliance with the LCFS reduction trajectory is achievable at levels well below the original 10% average fuel carbon intensity (AFCI) reduction target. Although staff has proposed a 20% reduction target for the year 2030, we assert that staff should explore setting a target above 20 percent by 2030.

## **Carbon capture and storage protocol**

Technologies that utilize CCS have the potential to be an important tool for reducing pollution from the liquid fuel supply chain; California's efforts to create a creditable pathway using CCS, if adopted, may have outsized benefits well beyond the four corners of the state. By allowing technology that is available today to capture and sequester carbon and turn those reductions into marketable commodities, the LCFS can broaden the range of strategies employed to reduce emissions overall, both for fossil fuels and renewable fuels. Furthermore, the LCFS can set an example for the use of CCS in other contexts, yielding positive momentum in the global quest to develop economic tools that can support CCS. Of course, EDF recognizes that additional work must be completed (and program design decisions must be made) before a final CCS pathway can be embedded in the rule. EDF supports CARB staff collaborative efforts with stakeholders to find solutions to remaining design details and are confident the state can develop a framework that yields positive progress.

## **Electric vehicle point-of-sale incentives**

One of the most important fuels in California for the long-term reduction of emissions from the transportation sector is electricity. For this reason, and to meet the Governor's goals of 1.5 million electric vehicles (EVs) on California roads by 2025 and 5 million by 2030, it is imperative that the LCFS properly rewards the use of electricity in the program. In short, the LCFS should establish well-crafted market signals that inspire maximum investment in and adoption of EVs – with particular emphasis on incentivizing charging EVs with renewable energy. For this reason, EDF supports the proposal to create a statewide point-of-sale incentive for new EV buyers, which would be administered by EV manufacturers and based on residential charging data recorded by the vehicles. EDF further supports the development of a mechanism to match EV charging with local renewable energy generation to generate credits using a zero carbon intensity value. Together, these opportunities can expand the range of compliance options available under the program, increase incentive values for consumers, and support continued deployment of renewable energy in California.

With regard to the point-of-sale proposal, EDF believes that EV manufacturers are well-positioned to effectively market and administer such a program given their natural touchpoints with consumers in their showrooms and dealerships. While utilities should continue to administer their rebate programs for vehicle manufacturers that do not participate in the program, it is important to minimize artificial barriers to customer entry and seek out opportunities to ensure consumers are fully educated about rebates and incentives during the vehicle buying process. Furthermore, as compared to the current program design which uses estimated electricity use volumes, moving the LCFS to a program that uses actual charging data enhances the integrity of the program overall and addresses some of the concerns raised by obligated parties.

Thank you for your continued leadership to develop an LCFS that provides lasting opportunities to cut pollution from California's vast transportation system. Please feel free to contact me with any questions you have.

Sincerely,

Timothy O'Connor  
Senior Attorney and Director  
Environmental Defense Fund