

February 19, 2008

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John Curtis  
California Air Resources Board  
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Re: Comment on Low Carbon Fuel Standard – Compliance and Enforcement Workgroup

Dear Mr. Simeroth and Mr. Curtis,

Thank you for your continued engagement of stakeholders and solicitation of input throughout the rule development process for the Low Carbon Fuel Standard. The purpose of this letter is to express a strong preference for an LCFS design that requires the physical presence in California of fuels used to comply with the standard. We believe that allowing trading of Renewable Fuel Standard (RFS) generated RIN permits without requiring actual low-carbon fuel to get to California reduces benefits of the LCFS and potentially undermines statewide alternative fuel policy goals. California has long been a proving ground for innovative technology and environmental policy and requiring physical presence of LCFS fuel to reach California furthers this tradition.

*Requiring low carbon fuel to be physically present in California will help drive the development of new low-carbon fuel production in California and will increase the overall environmental benefits of the LCFS.*

A main concern with allowing RIN trading as a compliance option is that CARB may lose an opportunity to incent California based ultra-low GHG fuel development through the LCFS. That is, if advanced fuels produced and entirely deployed elsewhere are able to count in the LCFS, RIN trading as a compliance strategy may undermine incentives to deploy new ultra-low carbon fuels in the state.<sup>1</sup>

With regard to biofuels, developing an LCFS that facilitates the growth of an in-state advanced biofuel industry will mean the state's vast resources of biological waste materials can be utilized

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<sup>1</sup> Although some argue that in-state production will occur regardless of the ability trade RINs for LCFS compliance, (due to the economic advantage of having reduced transport distances), such a system lacks assurance that the LCFS will drive change in California.

productively and extra environmental benefits can result. Current estimates indicate that 1.4 billion gallons of waste derived advanced biofuels can be produced from plant material currently produced in the state that otherwise would decompose to methane or be burned to release carbon dioxide and other greenhouse gases.<sup>2</sup> Using waste material to make fuel will have the double benefit of a feedstock that does not cause indirect land use change and reducing overall in-state emissions of greenhouse gases. One example of the availability of biological waste can be taken from the California rice industry that currently (as a general practice) allows rice straw to decompose in flooded fields rather than collecting the material for use.

With regard to non-biofuel LCFS compliance pathways, (i.e. electricity, hydrogen, biogas, etc.), requiring physical presence of transportation fuel used to lower the statewide APCI value will promote alternative technologies and alternative compliance strategies. Such alternatives are at the heart of the LCFS goals because they are fuels that can truly transform the transportation fuels paradigm and achieve very large GHG reductions when compared to fossil fuel.

*The design of the LCFS compliance mechanism should further the statewide fuels policy – motivate alternative fuel use and production in the state*

We believe that Executive Order S-01-07 expresses the statewide fuels policy that in-state use of low-carbon alternative fuels should be encouraged. As stated in accompanying White Paper from the Governor's office, "*fuel providers in California [must] ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO<sub>2</sub> equivalent gram per unit of fuel energy sold...*" Further, we believe EO S-01-07 and the main text of EO S-06-06 (establishing volumetric in-state biofuel production goals<sup>3</sup>) indicate that it is also statewide policy to encourage low carbon fuel production in California, including within the LCFS.

Currently, California and the broader United States may be on the cusp of a national second-generation biofuel boom. Driving this is the RFS volumetric mandates of the Energy Policy Act of 2007 (EPACT) that requires 15 billion gallons of never-before-developed advanced biofuels by 2020. As development and scale-up of the technology necessary to meet the RFS mandate occurs, the maturation of the California LCFS in 2020 may be asking fuel providers to supply approximately 4.5 billion gallons of biofuel with a 50% or greater greenhouse benefit.<sup>4</sup> Therefore, it is important to start the California alternative fuel production economy now, before the convergence of increasing in-state demand and national supply occurs, so the LCFS can help California emerge at the forefront of new fuel innovation.

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<sup>2</sup> See Biomass Collaborative Report

<sup>3</sup> "NOW, THEREFORE, I, ARNOLD SCHWARZENGER, Governor of the State of California, by virtue of the power invested in me by the Constitution and the statutes of the State of California, do hereby order effective immediately: ... Regarding biofuels, the state produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050."

<sup>4</sup> (14.5 billion gallons gasoline – fuel volume usage in 2020 with Pavley reductions)\* (20% - meeting LCFS goals by reduction of gas volume through replacement of gasoline with a 50% GHG benefit) / (0.66 – energy content ration of ethanol to gasoline) = approx. 4.5 billion gallons biofuel

*Although the concerns with requiring fuels to reach California are real, and should be addressed, they should not undermine California fuel policy.*

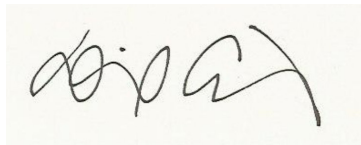
Environmental Defense and Energy Independence Now acknowledge the concerns of some members of the working group that retaining the fungibility of the United States ethanol market is important and that requiring biofuels to reach California may impact that. However, we also observe a more paramount interest that the LCFS must allow California to act as a proving ground for new environmentally-friendly biofuel technology. We do appreciate this concern of the biofuel industry and ask that CARB consider it as a system is designed that enables California to transform its transportation fuel mix.

Thank you for your hard work and thoughtful analysis in creating the first low-carbon fuel standard in the United States and California.

Sincerely,



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Climate Policy Analyst  
Environmental Defense



Daniel Emmett  
Executive Director  
Energy Independence Now



Remy Garderet  
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