Comments

Before the California Air Resources Board

on the

Proposed 15 day Amendments to the Low Carbon Fuel Standard Regulation

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The Engine Technology Forum ("ETF") is an educational association in the Washington DC area representing engine and equipment makers, fuel producers and suppliers. Members of ETF are leaders in advanced internal combustion engines, vehicles and equipment and their components as well as petroleum and renewable fuels. More information about us is available at www.enginetechforum.org.

We appreciate the opportunity to file these comments regarding the above captioned matter affecting the Low Carbon Fuel Standard (LCFS). As these comments were prepared under the extraordinary time constraints imposed by CARB, they are thus limited in scope and detail.

Given the complexity and substantial alteration of the original 45-day proposal late in this rulemaking process, CARB should provide for a minimum of an additional 15-day comment period. The current 15 day comment period effectively denies the public adequate opportunity to develop meaningful comments ***and*** reasonably assess the new and extensive proposals, including the proposed cap on the use of soy and canola oils and the proposed 2031 prohibition on hydrogen produced from fossil gas feedstocks. This could substantially impact the availability of hydrogen for use in both fuel cells and heavy-duty internal combustion engines.

CARB's climate change goals are aggressive in both the level of reduction of greenhouse gases and accelerated time frame. The state is explicit in its view and policies that envision and effectively dictate nearly the entire transportation sector shifting from the use of internal combustion engines (ICE) and liquid and gaseous fuels to electrification.

Internal combustion engines (ICEs) running on gasoline, diesel or natural gas are the dominant power behind California's economy today and are expected to continue to serve trucking and other sectors as the majority fuel type for decades to come, even as the state implements its policies that seek to transition only to zero emission vehicles (ZEVs). Even if most vehicles do shift to electric, there will be many heavy-duty vocational applications that will not transition to BEVs for a long time, if at all.

Asevidenced by consumer response, delaying, or downgrading electric vehicle investments and deferring introduction of new models announced by a number of vehicle manufacturers, the pace of electrification of the transportation sector (light, medium and heavy-duty vehicles) is proving to be uneven and uncertain. This elevates the importance and significance of having an effective and affordable low carbon fuels policy available for all sectors.

By most measures, California's low carbon fuel program has been a success in reducing carbon emissions from the transportation sector through gradually reducing carbon intensity of the fuel pool. However, the proposed feedstock caps and "sustainability guardrails" on biofuel production impart a greater burden than benefit to Californians. Renewable fuel producers, petroleum

suppliers and fleets that must rely on ICEs using low carbon fuels to comply with the spirit of California's ZEV/near-ZEV transition will be most impacted.

The use of low carbon renewable fuels across this vast population of vehicles has contributed substantially to California's progress and current success in reducing greenhouse gas emissions. According to CARB's own data (See Figure 1, LCFS Dashboard), the program in its present form is exceeding expectations in reducing carbon intensity from transportation fuels.

However, these proposed amendments seem certain to deter further progress from renewable fuel producers and their suppliers while undermining the viability of transportation fuel providers. and driving up the cost of producing and supplying California's unique transportation fuels.

The proposed amendments disrupt the predictable and orderly transition of the fuels industry in a way that unnecessarily increases costs to the economy and discourages investment in renewable low carbon fuels. In its present form, it discourages improvements that could help California accelerate achievement of the continued progress toward the state's climate goals, and through its leadership, the contribution of other states in helping to achieve national climate goals.

The proposed amendments' increased stringency and diminished compliance tools will likely compromise technology neutrality by the elimination of pure market signals that incentivize the production of lower-CI fuels.

Acceleration of reduction in carbon intensity (CI) from 20% to 30% by 2030 with a 9% reduction for 2025.

On the one hand, the accelerated CI reduction would appear to support greater investment by renewable fuel producers. However, when combined with the proposed feedstock caps (see II below) raises concerns about the ultimate impact of the amendments on costs and adequate supply of low carbon fuels into the transportation fuel pool. It also seems to unfairly diminish the potential for ICEs using low carbon fuels against other decarbonization strategies.

We urge CARB to weigh the ability to implement more aggressive CI reduction targets with the actual feasibility of achieving them considering the proposed caps on soy and canola feedstocks as noted below.

ARB proposes to cap LCFS credits at 20 percent for biomass based diesel produced from soy and canola oils (Section 95482 (i).

These caps on LCFS credits unfairly disadvantage biodiesel and renewable diesel fuel; the only viable, large-scale cost effective alternatives for the most difficult to decarbonize sectors like heavy-duty vocational trucks, off road equipment and marine and rail. According to CARB, biodiesel, and renewable diesel now account for 73% of California's diesel pool.

The proposed credit caps on biomass-based diesel produced from soy and canola oils inserts CARB influence into an otherwise market-driven approach. The net result is likely to be arbitrarily limiting the use of these more accessible and affordable feedstocks (soy and canola). According to the American Soybean Association, biofuel sourced from soybean and canola oil accounted for about 30% of the renewable diesel used in California in the first quarter of 2024.

CARB has not provided an ample explanation as to why a cap is needed. According to CARB's own estimate, under the more aggressive proposed CI reduction target, soybean oil based biofuel will become a deficit generating fuel as early as 2033. If instituted, the Automatic Adjustment Mechanism (AAM) soybean oil based biofuel will become a deficit generating fuel as early as 2030. An arbitrary cap is not needed as the program is designed to transition away from biofuels made from soybean oil.

In addition, the anticipated transition from the federal blender's tax credit to the clean fuel production credit will provide further financial incentives to expand the supply of waste-based biofuels. Reduced availability of tax credits for domestic produced soy and canola based biofuels will send a strong market signal to invest in waste-based biofuels as soon as early 2025.

There are likely to be unintended consequences of the proposed amendments. First, a time differentiation at this time between primary oilseed crops and oilseed crops of renewable biomass cultivated as an intermediate crop is needed. As an example, growers are already cultivating winter canola that is planted as an intermediate crop and not a primary crop. Intermediate crops, including winter canola provide lower carbon feedstocks to produce renewable biofuels and should not be subject to a cap. Second, by capping the LCFS credits for soy and canola at 20%, this may discourage investments in producing both biodiesel and renewable diesel fuel more sustainably. Given the close linkage of renewable diesel (feedstocks and production) with sustainable aviation fuel (SAF), it may also have the perverse effect of negatively impacting the cost of (SAF) if renewable diesel production is negatively impacted by the new limits.

Unfortunately, this truncated timeline prevents a more thorough and thoughtful analysis of these and other potential consequences of the proposed amendments.

ICEs will continue to play a dominant role in California and the US for decades to come and providing more time to assess the role of renewable fuels in reducing emissions is prudent as the state struggles with delays in meaningful penetration of ZEVs among the state's commercial fleet.

Thank you for the opportunity to provide these comments.

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