



6 June, 2023

State of California, Air Resources Board

Regarding: Public Workshop: Auto-Acceleration Mechanism for the Low Carbon Fuel Standard

Dear Low Carbon Fuel Standard team:

Thank you for the opportunity to comment on the ideas and materials related to the Low Carbon Fuel Standard in California presented in this workshop. The University of California, Davis Institute of Transportation Studies, along with the Policy Institute for Energy, Environment, and the Economy has been engaged in research, policy analysis, and technical assistance relating to alternative fuel policy for well over a decade. We commend CARB and the LCFS program staff ("Staff") for holding robust, collaborative workshops like the one on May 23, 2023, which allow stakeholder engagement and focused discussion on an important topic, 'Auto-Acceleration Mechanism for the LCFS.' We emphasize that neither UC Davis, nor the Policy Institute for Energy, Environment, and the Economy takes any formal positions regarding regulatory action and we are not requesting any specific actions or outcomes.

Our presentation at the workshop summarized most of our thoughts on the topic of auto-acceleration mechanisms. The comments and dialog following the workshop presentations brought up some additional thoughts that should be considered, as Staff consider how best to design and implement an auto-acceleration mechanism.

First, we reiterate the importance of considering the impact of pre-2030 targets on the post-2030 trajectory they imply. As discussed in our presentation, under all scenarios we considered, rapid target increases, on the order of 5-6 percentage points of target stringency, were needed for 5+ years in the early 2030's, with slightly smaller increases needed before and after this period. This is because by the late 2020's, the vast majority of auto sales in California is expected to be electric vehicles (EVs), given state policies and current trends. The combined effect of reduced gasoline demand from displacing conventional vehicles with EVs, and the credits generated by charging EVs will dramatically shift the LCFS credit market. Despite high EV sales, the majority of vehicles in California's fleet will be ICE through 2035 or later, meaning that drivers of the remaining conventional ICE vehicles may be exposed to the gasoline price increases resulting from the necessary rapid target acceleration. Higher levels of target ambition increase the likelihood that higher volumes of crop-based biofuels as well as biogas will be used for compliance, especially in the near term; and Staff have already indicated CARB is considering a limit on or shifted lifecycle accounting for such fuels. The potential impact of this change should be considered alongside that of the auto-acceleration mechanism (and any new targets to 2030), since the combination of higher targets with limitations on sources of compliance credit



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could have undesired outcomes. To avoid such an outcome, the near-term target acceleration should not exceed the amount necessary to restore balance to the LCFS credit market and support needed investments in low carbon fuels and infrastructure.

Second, there is no mechanism in the LCFS at present to establish a price floor or other guarantee of minimum value for compliance credits, nor any mechanism to ensure a balance between credit supply and demand. A primary goal of an auto-acceleration mechanism is to provide this element and help establish a balance between supply and demand in the LCFS credit market. Supporting this balance can provide reassurance to parties that would issue loans to, or make investments in critically-needed fuel production capacity or related infrastructure, that credit prices will remain robust. As such, the perspective of parties that make such investments are important to take into account as Staff design such a mechanism. Given that projects must demonstrate profitability over an extended period of time in order to access capital needed for development, the credibility and adequacy of an auto-acceleration mechanism to potential project financiers will be important to it having its desired effect.

Thank you for the opportunity to collaborate on this important issue. If we can offer any additional clarity, please do not hesitate to contact us at cwmurphy@ucdavis.edu.

Signed,

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