October 16th, 2024

Matt Botill
Chief, Industrial Strategies Division
California Air Resources Board
1001 I Street, Sacramento, CA 95814

Mr. Botill and CARB Staff,

I am writing to you on behalf of Generate Capital, PBC ("Generate") regarding the latest proposals for amendments to the Low Carbon Fuel Standard ("LCFS"). As a leading sustainable infrastructure company based in San Francisco, Generate is dedicated to building, owning, operating, and financing infrastructure solutions that address critical needs across clean energy, transportation, water, waste, agriculture, and smart cities. Since our founding in 2014, we have partnered with technology- and project developers to deliver sustainable resources to over 2,000 customers, including companies, communities, school districts, and universities.

We greatly appreciate the hard work and perseverance of CARB staff throughout this rulemaking process. We know better than most how instrumental CARB's leadership has been in fostering innovation and investment in low-carbon infrastructure, and your receptiveness to stakeholder feedback has been commendable. You have a hard job, and you have done it well.

While we have identified several areas in which we believe further improvements could be made, we unequivocally endorse the overall rulemaking package. The consequences of delaying or not finalizing this package would be catastrophic to the efforts to decarbonize California's largest emitting sector: transportation. In the body of this letter, we will outline several key points, including our recommendation to raise the 2030 carbon intensity (CI) reduction target to 35%, our support for the Auto Acceleration Mechanism ("AAM"), and our concerns regarding specific provisions on RNG and fossil jet fuel. We hope you take each of these points as feedback for how to improve to the LCFS program through guidance over the coming weeks and months, but do not confuse these with reasons for the board to not adopt the currently proposed rule.

We appreciate your consideration of our views and look forward to continuing our collaboration with CARB to ensure that the LCFS program remains a driving force in marshalling private capital towards the fight against climate change.

Sincerely,

Asher Goldman

Asher Goldman
Vice President
Generate Capital

Support for Approval of the Rulemaking Package

After years of engagement on the changes needed to the LCFS program, we are pleased that CARB is close to adopting sorely needed new rules. **We endorse the proposed LCFS rulemaking package and strongly urge CARB to approve it without delay.** As is true with any compromise, there are aspects of the rule which we would have preferred to see adjusted, but it should be said unequivocally that any failure to act would be disastrous for the goal of decarbonizing California's transportation sector, which remains the state's largest emitter of greenhouse gases.

CARB's careful navigation through the difficult terrain of managing stakeholder input from diverse, and sometimes opposing, interests has been remarkable, and your commitment to finding balanced solutions has been critical. The time for action is now. The board's approval of this package will ensure California remains a leader in climate policy and a model for other states and countries to follow.

Expand the LCFS's Total Ambition to Target 35% CI Reduction in 2030

While we support the increase of the 2030 CI reduction target to 30%, we believe this figure is insufficient in light of recent market data. The change to the 2030 target from 20% to 30% is necessary and welcome, but a 30% target is not enough to keep the market from overheating. The market has consistently overperformed, and it is now highly probable that the market will exceed a 30% CI reduction by 2030. Instead, **we propose CARB adopt a 35% CI reduction target for 2030** which will push the market towards further investment in climate solutions and will come closer to aligning transportation, the state's largest source of emissions, with California's overall ambition of cutting emissions by 48% by 2030.

While the proposed rule does institute other safeguards against significant market overperformance (such as the Auto-Acceleration Mechanism, the "AAM"), setting a 30% target for 2030 would put the market in the position of effectively relying on the AAM to get the CI reduction targets right, rather than treating the AAM as a backstop mechanism. This would risk leaving the market imbalanced for long periods, stifling investment in critical low-carbon infrastructure as the market oscillates between boom and bust. Instead, a 35% target would send a strong signal to the market that it is time to invest in decarbonization at scale. It would encourage capital deployment and infrastructure development now rather than waiting for the market to falter before the AAM is triggered and costing us time which we do not have to avoid the worst consequences of climate change. This higher target would align with the pace of progress that California has already demonstrated is possible and with the broader decarbonization targets for California's economy.

Support for the Inclusion of the AAM, and Proposal to Perfect the AAM

We strongly endorse the inclusion of the AAM in the rulemaking package. Given the large uncertainty inherent to any modeled forecast of a system as complex as California's transportation system, including this sort of safeguard is paramount to ensuring the continued ability for the LCFS to drive decarbonization outcomes.

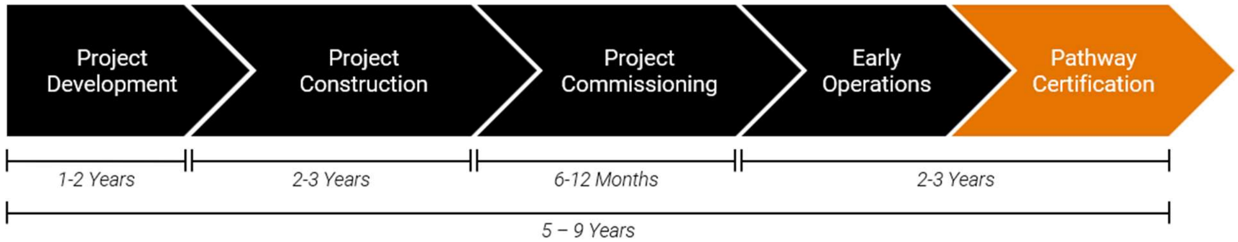
We are pleased to see the latest proposal with a rolling four-quarter triggering mechanism in place of the rigid calendar-year method. This change will better reflect when overperformance justifies intervention. An aspect of this change which we would like CARB to clarify is the schedule to update the CI reduction targets when the triggering period is not a calendar year. If, for example, the AAM were triggered based on the period of 2027 Q2 – 2028 Q1 (meaning the market would have the period's data on 7/31/2028), the proposed rule does not specify if the CI targets would be amended for the 2029 calendar year (the proximate January 1) or not until the 2030 calendar year (the January 1 following the proximate May 15). §95484(c)1 of the regulation indicates that CARB will post updated CI schedules on May 15 of each year, meaning an off-calendar-year triggering would not impact the CI targets for as long as 2.75 years after the beginning of the triggering period. This is too slow of a response to be a meaningful safeguard to market overperformance. §95484(c)2, however, supports the idea that new CI targets would go into effect on the proximate January 1, a year sooner than would result from waiting until the following May 15 to announce what the market already knows to be true well before then. We recommend that CARB provide guidance clarifying that the CI reduction targets are to be adjusted on the proximate January 1 to the data release demonstrating the conditions to trigger the AAM have been met and that updated CI reduction targets will be posted on 2/15, 5/15, 8/15, or 11/15.

An additional area we would like to see refinement in the weeks and months following the passage of this rulemaking is regarding the magnitude of the "acceleration" when the AAM is activated. Whereas the currently proposed rule advances CI reduction targets by one year, **a stronger system would adjust future CI targets by the actual amount of overperformance relative to the CI target**. While pulling forward the CI targets by one year certainly has appeal in its simplicity, there is no guarantee that such a magnitude would be the appropriate response in all cases and could represent an under- or over-correction. Instead, calculating the AAM's magnitude based on the degree to which the market is overperforming its targets and increasing future CI reduction targets by the same amount will ensure that the adjustment is appropriately calibrated for any degree of overperformance and allow the LCFS to continually drive decarbonization.

<u>Include a Safe Harbor for Avoided Methane Crediting Periods</u>

We commend CARB for considering market feedback and iterating on the proposal which would reduce the LCFS's recognition of the benefits of avoiding methane emissions. The new amendment to the proposal, retaining the existing rules on crediting periods for existing projects, demonstrates CARB's role as a steady partner for market participants. For infrastructure assets with useful lives of several decades, it is vital for investors and project developers to be able to rely on regulatory stability for existing projects if they are going to be able to invest in new projects across any technology. This response to market feedback helps to provide that level of trust.

The currently proposed rule rightly excludes retroactive changes to existing projects, but there remains a potential gap for projects already under development or in early operations which have not yet received pathway approvals. The timeline from project conception to achieving a certified pathway is often lengthy due to the time-consuming process of infrastructure development and construction, and due to the current backlog of pathway reviews at CARB. For many technologies, it is often 5 years or more from final investment decision to obtain a certified pathway; for large scale developments such as those for sustainable aviation fuel ("SAF"), the timeline can approach 10 years.



We propose that CARB work with market participants to issue further guidance on the regulation to clarify that the rule allows for a safe harbor, similar to what the Federal government has for years used for investment tax credits ("ITC") eligibility. This would provide much-needed stability and confidence for investors, who should not be forced to guess whether there will be policy changes during the 5-10 years between allocating capital to a project and the pathway being certified. To motivate capital towards the decarbonization of California's transportation sector, CARB can help remove financial friction through this clarification.

Maintain Existing Rules for RNG Deliverability

We urge CARB to reconsider the proposed rules regarding the physical deliverability of RNG included in the latest rulemaking package. There is no environmental benefit from this requirement; it would serve solely as a thumb on the scale to disfavor one type of decarbonization solution at exactly the moment when we cannot afford to be picky about which types of climate solutions we promote. Physical deliverability rules would result in many RNG projects shutting down and would result in increased methane emissions, counter to CARB's and California's overarching goals.

The environmental benefits of RNG are predominantly achieved upstream through methane emission abatement; after that point, the RNG is chemically identical to fossil gas and there are no climate advantages to requiring physical delivery of these molecules. **For the upstream activity to occur, though, there must be an economically viable end market for the downstream product**; the LCFS market has enabled methane abatement to be economically attractive, which is why we have seen such outstanding progress made on reducing methane emissions over the past several years.

This proposed rule, however, would add unnecessary complexity and barriers for methane abatement projects, particularly for existing projects that were developed under the assumption that CARB's prior set of rules would hold. The proposed deliverability rule ignores the operational realities of the American natural gas distribution system, which is based on mass balancing (a system approximating the book-and-claim methodology already used in the LCFS) rather than a point-to-point delivery system. Given this, **it is entirely unclear if the proposed rules are even possible to comply with**. Further, the contingent trigger based on ZEV adoption means that investors and developers will be in the dark as to what the future economics of their projects will be; this will mean only expensive, risk-seeking capital will finance these projects, slowing methane abatement and making the outputs more expensive for consumers.

We urge CARB to reconsider this requirement, as it threatens both the viability of existing projects and the potential for investment in future methane abatement.

Reincorporate Fossil Jet Fuel as a Deficit Generator

We remain surprised by the decision to remove fossil jet fuel as a deficit generator from the previous 15-day package. The absence of deficits from fossil jet fuel will significantly reduce the financial pressure on the aviation industry to adopt SAF, a key element in the decarbonization of air travel.

The rationale provided in August 2024 contradicts the core philosophy of the LCFS: that pricing carbon emissions and reductions incentivizes the adoption of low-carbon alternatives. At the time, CARB provided commentary saying that the waiver from deficit production for fossil jet fuel was maintained because removing it “did not guarantee that airlines would procure and use alternative jet fuel”. That represents a misunderstanding of the power of the LCFS program, in which no specific fuel is ever mandated but instead California sends pricing signals to market actors to invest in and deploy low carbon fuels. If that sounds too theoretical, consider what we have regularly seen in the market: SAF projects have struggled to obtain financing because the airlines procuring the fuel are not willing to pay meaningfully more than the price of fossil jet fuel. By pricing the emissions from fossil jet fuel, the LCFS would create the economic imperative for airlines to account for the cost of carbon into the price they pay for low-CI alternatives, thereby enabling substantially more capital to fund the deployment of SAF production capacity.

Further, the inclusion of fossil jet fuel as a deficit generator would not preclude additional action – by CARB or by California’s legislature – to mandate the adoption of sustainable aviation fuel. The decarbonization of air travel will require multiple policy drivers and these two are certainly not mutually exclusive but rather reinforcing.

Without fossil jet fuel as a deficit generator, California risks slowing progress in reducing emissions from one of the most challenging sectors to decarbonize. We urge CARB to **reinstate fossil jet fuel as a deficit generator** to ensure the aviation industry contributes to California’s broader climate goals.

Thank you once again for your hard work in advancing the LCFS program. We believe that the adjustments outlined in this letter will further strengthen the program, stimulate private investment, and accelerate California’s decarbonization efforts. We look forward to continued collaboration with CARB to ensure the success of the LCFS.