GENERATE

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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 California Air Resources Board’s ongoing efforts to refine and strengthen the LCFS program. Your openness to stakeholder feedback and your commitment to creating a robust and impactful policy framework have been instrumental in maintaining California's status as a leader in climate policy. CARB’s stewardship of this program – which has stimulated billions of dollars of private capital and which has decarbonized California’s transportation sector faster and to a greater extent than was considered possible – is a credit to the hard and too-often-underappreciated work of CARB staff and leadership.

We acknowledge the complexity and challenges associated with the LCFS rulemaking process and would like to offer our perspective on the latest proposed changes. In the following sections of this letter, we outline our support for specific aspects of the proposal while highlighting areas where we believe further adjustments could better serve California’s long-term climate goals and foster continued investment in low-carbon infrastructure.

Thank you once again for your diligent work on these critical issues and for considering our comments as part of your decision-making process. We would be happy to discuss the views included in this letter and other aspects of the LCFS program with CARB staff over the coming weeks as the rulemaking process reaches its conclusion.

Sincerely,

Asher Goldman

Asher Goldman
Vice President
Generate Capital

Support for the Increase to the 2025 CI Reduction Target

We strongly support CARB's proposal to increase the 2025 carbon intensity reduction target by 9%. This adjustment is a crucial step toward restoring balance in the LCFS market, which has faced challenges due to oversupply and low credit prices. By setting a more stringent CI reduction target, CARB is sending a clear signal to the market that it remains committed to driving meaningful reductions in carbon emissions. This move is likely to invigorate investment in low-carbon technologies, ensuring that California continues to lead in the fight against climate change.

While the 9% reduction is a positive and much-needed step, we believe it represents the minimum necessary to achieve market equilibrium and will not undo the growth in the credit bank seen over the last several years. A larger step-down should be considered to address the large reserve of supply in the credit bank. The credit bank is more than three times larger than it was 3 years ago, and we anticipate that 2024 data will show further acceleration to the bank's growth. By increasing the step-down to 10% or 11%, CARB could more effectively reduce the excess credit supply and provide a stronger foundation for future investments in sustainable infrastructure.

Concerns Regarding Proposed Changes to Renewable Natural Gas Treatment

Avoided Methane Crediting: The proposed changes to the treatment of Renewable Natural Gas ("RNG") present significant challenges that could undermine both economic and environmental goals. Specifically, the proposal to remove a full crediting period from existing RNG assets is deeply concerning. These investments were made under the assumption of a stable and predictable regulatory framework, and retroactively altering this framework risks creating substantial uncertainty for investors. Such changes would lead to project disruptions, as well as diminished trust in CARB's commitment to maintaining consistent policy guidelines. This uncertainty extends beyond RNG projects and would negatively impact other areas where CARB is attempting to motivate investment. This includes electric vehicle charging infrastructure where the economic proposition is heavily dependent on the investors' trust that CARB will not change the rules in the future.

While the proposal to limit avoided methane crediting is most concerning for existing assets, the rule would also result in substantial negative outcomes by limiting the development of new assets. CARB has been highly effective in motivating private actors to prevent methane emissions. By limiting avoided methane crediting to a shorter period of time, CARB will be kneecapping one of the most powerful tools it has to limit the emissions of short-lived climate pollutants in support of SB1383. At the very least, this shortened crediting period should be conditional on California implementing policy in support of alternative end markets for RNG (e.g. hard to decarbonize sectors like glass and steel manufacturing) to ensure there is not a stark increase in methane emissions if these assets were to lose their economic incentive to continue operating and as a result be forced to shutter.

Deliverability: In the August 12 guidance, CARB staff proposed to add a condition for out-of-state gas to be injected into a pipeline with "majority directional flow" towards California. The first issue is that the proposed requirement fails to consider the operational realities of the American natural gas distribution system. The system is designed around a balancing mechanism rather than a point-to-point delivery model – that is, the entire system is similar to the existing book-and-claim accounting mechanism. By mandating physical deliverability of RNG, CARB would be treating fossil natural gas – which is currently and would continue to be book-and-claimed into California – preferentially to low-carbon natural gas.

Second, this change would stifle investment into methane abatement solutions. Given the uncertainty that the proposal would create, with a lack of regulatory clarity until at least 2026 on which (if any) projects would meet the conditions of this proposal, investment into all RNG projects would slow or stop. If CARB is serious about hitting the proposed long-term CI reduction targets or abating meaningful volumes of short-lived climate pollutants, a cessation of new RNG projects is not a viable solution.

Lastly, the proposal would not serve any actual environmentally beneficial purpose. Not only is there no GHG emission benefit when requiring physical delivery of RNG compared to using a book-and-claim mechanism, there is likely to be an increase in emissions resulting from a delivery mandate as (needlessly) moving molecules around requires energy input. What the LCFS program solves for is a reduction in carbon emissions from fuels; by determining which projects are "in" and which are "out" based on a factor which has no relationship to lifecycle carbon emissions, CARB deviates meaningfully from the intent of the LCFS program.

The proposed deliverability requirement would increase costs and complexity without delivering corresponding environmental benefits, ultimately discouraging investment in low-carbon fuel projects. We believe that a more nuanced understanding of the natural gas distribution system is necessary to create policies that truly advance California's climate goals.

We recommend that CARB reconsider these changes. The two proposals discussed do not aid CARB in the goal to decarbonize transportation, but instead serve only to add complexity and friction to the system. Instead, we suggest that CARB focus on policies that provide stability and predictability for investors and developers to be able to deploy much needed infrastructure. By ensuring that existing assets are treated consistently and that new requirements are aligned with the realities of the energy market, CARB can foster continued investment into effective, proven climate solutions at scale.

Concerns Regarding the Definitional Change for "Food Scraps"

We would like to address the definitional change included in the current rulemaking regarding "Food Scraps." As proposed, the definition effectively removes credit for processing organic waste that comes directly from food manufacturers. This waste stream typically consists of off-spec products or excess supply that needs to be disposed of in a sustainable manner. While the ideal solution would be to re-purpose this material—such as by converting it into animal feed—this is often not feasible due to various logistical and regulatory challenges.

When direct alternative uses are not possible, the next best sustainable option is to divert this organic waste away from landfills to compost and anaerobic digestion facilities. The proposal from August 12, however, appears to exclude this type of waste from qualifying as "Food Scraps," potentially discouraging its beneficial use in energy production and nutrient recycling. This exclusion runs counter to the principles of waste reduction and sustainable resource management that underpin California's broader environmental goals, such as those articulated in SB1383. If implemented as proposed, the narrow definition for “Food Scraps” would make meeting the requirements of SB1383 even more challenging than they are already proving to be.

We recommend that CARB adjust the definition of "Food Scraps" to include food waste from food manufacturers that cannot be beneficially reused for human or animal consumption. By doing so, CARB can ensure that all feasible routes for sustainably processing organic waste are supported under the LCFS, thereby promoting a more comprehensive approach to waste management and further reducing the environmental impact of California's critical food production sector.

Impact of Removing Fossil Jet Fuel as a Deficit Generator

The decision to remove fossil jet fuel as a deficit generator within the LCFS program is a major concern, as it puts a significant source of transportation emissions outside of this program and would fail to force polluters to account for the cost of those emissions. Fossil jet fuel was expected to generate tens of millions of deficits over the next 20 years, playing a critical role in incentivizing the adoption of sustainable aviation fuels (SAFs) and other low-carbon alternatives. By removing this fuel class from the deficit generation framework, CARB would weaken the economic incentives for the aviation industry to transition to cleaner fuels, thus slowing progress toward the state’s broader climate goals.

The rationale behind this decision appears to overlook the importance of LCFS in pricing carbon emissions effectively. In the documentation published on August 12, CARB stated “[p]ublic commenters noted that the original proposal did not guarantee that airlines would procure and use alternative jet fuel”. The LCFS program's strength lies in its ability to internalize the cost of carbon emissions, making high-carbon fuels less competitive and low-carbon alternatives more. We only have to look at the last five years of the diesel pool to see this in action: a low-CI diesel mandate or a cap on fossil diesel would not have resulted in nearly as much fossil diesel reduction as the price signals from the LCFS program effectuated by incentivizing the private sector to invest in new production capacity for fossil diesel alternatives. By removing fossil jet fuel as a deficit generator, CARB risks diluting this crucial price signal – both through the elimination of the cost on fossil jet fuel use and through the reduced benefit to SAF as a result of a lower LCFS price – which would hinder the adoption of SAF and delay the decarbonization of the aviation sector.

We strongly urge CARB to reconsider this decision and to explore ways in which the LCFS program can continue to drive emissions reductions in the aviation sector. A more integrated approach, where the LCFS framework works alongside an aviation sector GHG reduction mandate, would provide the strongest incentives for the industry to reduce its carbon footprint.

Recommendation for the 2030 CI Reduction Target

Given the substantial increases to the credit bank over the last 3 years, the removal of fossil jet fuel as a deficit generator, and the impact of other regulatory measures such as Advanced Clean Cars II, Advanced Clean Fleets, and Advanced Clean Trucks, we believe that the currently proposed 2030 CI reduction target of 30% is insufficient both as a matter of ensuring a stable market and to ensure California meets its climate goals. The latest market performance data suggests that the LCFS program is on track to exceed the 30% CI reduction target well before 2030, which would result in unnecessary market volatility and could trigger the Auto Acceleration Mechanism (AAM). To avoid this outcome, we recommend extending the 2030 CI reduction target to 35%, a level that would better align with the state's decarbonization objectives and the realities of the LCFS market.

As the LCFS program continues to evolve, it is important that CARB sets targets that are both ambitious and achievable, ensuring that the program remains a driving force for decarbonization in California's transportation sector. We have recently experienced the outcome of setting the targets too low, which has resulted in diminished capital investment into climate solutions for the last several years. With the consequences of climate change more apparent today than ever before, California cannot afford the cost of any more avoidable delays.