1725 Montgomery Street, Floor 3
San Francisco, CA 94111
415-810-0448
Brightmark.com

March 15, 2023

The Honorable Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: February 22, 2023, Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard

Dear Chair Randolph:

Brightmark appreciates the opportunity to submit comments on the *February 22nd Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard ("February 22 LCFS Workshop").* We appreciate the California Air Resources Board (CARB) engaging with stakeholders regarding potential changes to the Low Carbon Fuel Standard (LCFS) program.

California's leadership in climate action through aggressive reduction targets and corresponding programs like the LCFS accomplish actual pollution reduction outcomes by establishing market certainty and driving private investment. The state's leadership and programs provide key solutions to the global climate challenge.

Like the November 9 LCFS Workshop, the February 22 LCFS Workshop continues to present uncertainty to the market and risk stalling additional investment in low carbon fuel development. As we have previously stated, we recommend that CARB restate a commitment to renewable natural gas (RNG) development through the LCFS program as a key low carbon fuel and methane abatement strategy. We recommend CARB increase the LCFS carbon intensity reduction target to 35-40% by 2030, and that CARB postpone consideration of controversial proposed changes to avoided methane crediting and reducing incentives for RNG use in natural gas vehicles.

Brightmark Overview

Brightmark was founded in 2016 with the mission of solving some of the greatest environmental challenges facing the United States. One of these solutions is capturing methane emissions from organic waste, and through the natural process of anaerobic digestion produce biogas and digestate. Methane is a dangerous Short Lived Climate Pollutant (SLCP). Methane along with black carbon (soot), and fluorinated gases (F-gases, including hydrofluorocarbons [HFCs] "have an outsized impact on climate change in the near term, compared to longer-lived GHGs, such as CO2. That means they have an outsized impact on climate change in the near term – and means

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that targeted efforts to reduce short-lived climate pollutants emissions can provide outsized climate and health benefits, within weeks to about a decade". [1]

In addition to reducing fugitive methane emissions from manure, biogas produced through state-of-the-art anaerobic digesters can be further processed and converted into renewable natural gas (RNG) for use as a transportation fuel or used to decarbonize the gas and electricity sectors. Meanwhile, the digestate can be utilized as a fertilizer or soil amendment. Even when combusted, biogas and renewable natural gas may have carbon intensities that are neutral to negative due to averted methane emissions and their use to displace carbon intensive fossil fuels.

Brightmark has low carbon intensity (CI) projects on dairy farms across the U.S., including in California. We work with dairy farmers to harness the energy potential of their dairy manure, provide them with solutions to meet their greenhouse gas reduction goals and enhance farm profitability. We are committed to reimagining waste and building projects that benefit farms, their dairy, their communities, and the planet.

These facilities provide a win/win scenario for farmers and local communities; they help address methane emissions from organic waste produced locally and turn that waste into renewable energy and fertilizers. To date, our projects have offset over 400,000 metric tons of CO2.

The LCFS program, and the certainty it provides to the market, is a key factor in the long-term success of projects like these to address environmental challenges.

California Leadership in Climate Solutions Should Lead to More Aggressive Targets

California has a long history of supporting aggressive actions to address environmental challenges, like climate change. Governor Newsom has called for an even more aggressive approach to achieve climate neutrality. As CARB has stated previously, "[s]ignificant reductions in transportation emissions are needed to achieve state's air quality and climate goals."

We believe that the minimum reduction target should be at least 35% by 2030 with consideration given to even higher targets of 40% or more. As was demonstrated with the Renewable Portfolio Standard (RPS) program in California, industry rises to the occasion with aggressive targets.

An increasingly stringent target provides market and regulatory certainty. Participants in the LCFS program have already demonstrated the ability to invest in long-term assets that drive CI reduction targets that exceeded expectations. Instead of pursuing changes to the regulation that would limit fuels and credit generation, Brightmark supports higher targets to increase credit demand and maintaining a diverse fuel and credit generation mix.

[1] California Air Resources Board, *Draft 2022 Scoping Plan Update*, (released May 10, 2022) p. 23 "The United Nations Environment Programme's Global Methane Assessment advises that achieving the least-cost pathways to limit warming to 1.5°C requires global methane emission reductions of 40–45 percent by 2030 alongside substantial simultaneous reductions of all climate forcers, including CO2 and SLCPs."

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Market and Regulatory Certainty

The success of the LCFS to date shows the market's ability to deliver, together in partnership with CARB. The LCFS at its core is a market based, fuel agnostic regulation that does not pick winners and allows for all fuels to compete.

Market and regulatory certainty are based on trust in California as a reliable place to sell low carbon fuel and credits to meet and exceed climate goals. However, to continue to achieve aggressive targets, CARB must promote a long-term stable environment to encourage investors and teams to create CI reducing projects. A long-term stable investment environment has the following attributes:

- At least 20 years of secure investment
- Stable cash flows by designing the program to minimize price volatility in credits
- Shortening the time period to get projects approved
- Truing up credit generation to actual reductions
- Aggressive 2030 to 2045 targets to provide the right long-term price signals

At Brightmark, investment decisions were made at price levels significantly higher that current prices. If credit prices were at current values when investments decisions were being made for our dairy digester projects, Brightmark likely would have gone in a different direction and not developed dairy digester projects.

Focusing on Solving the Problem

The goal of the LCFS is to reduce the carbon intensity of transportation fuels through greenhouse gas emission reductions. The LCFS is currently the only market with the economic incentive to develop carbon negative projects, including dairy biomethane.

Dairy digester projects, due to the low energy density feedstock and higher required residence time, among other reasons, result in higher costs per MMBtu produced. Limiting what RNG can participate in the LCFS or the proposed changes to avoided methane crediting would result in these projects not being economical and increase the likelihood that these projects would become stranded assets with manure going back into lagoons and returning to point sources for methane. In most cases, the only manure management regulation for non-California dairies is having a lagoon with at least six months of storage due to limitations of land application during colder months.

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Brightmark does not support the continued proposal for the phase-down of avoided methane crediting, especially when those projects have the ability to achieve aggressive CI reduction outcomes. There have been significant investments made in existing and future projects based on the current rules and trust in the LCFS program that emission reductions from these projects would be valued for delivering positive outcomes.

Brightmark supports continued alignment of deliverability requirements for RNG with that of the RFS program. Biomethane projects that theoretically have the ability to deliver to California should be included, as the program currently operates. Current rules require that a project's CI score measure the additional carbon impact of traveling further in the CI calculation. Gas pipelines, contrary to the transmission power grids, can deliver biomethane from east coast to west coast. This is an important distinction when considering "deliverability". Introducing an artificial notion of location will limit the supply of projects.

CARB should not consider any changes to the avoided methane or book and claim of RNG until there are programs available that provide the incentive necessary to keep these projects from becoming stranded assets. Any limitations to avoided methane crediting and book-and-claim will result in stranded assets.

The success and market certainty of the LCFS program should be based on increasing the demand of credits, not limiting fuels and credit generation. Increasing demand for credits will result in greater overall emission reductions and a more diverse and stable credit pool.

Recommendations

Brightmark supports the following recommendations that will promote long-term certainty in the program and allow for accurate generation of credits for total emissions reduced by shortening the time period to get projects approved and truing up credit generation to actual reductions.

The first recommendation is modifying the pathway registration process to allow for third parties to complete part or all of the initial pathway review that occurs prior to routing applications to the verification body (VB). Currently this part of the pathway registration process is taking more than 6-9 months. The use of third parties will allow for resources to increase or contract as application levels fluctuate in addition to shortening the timeframe for applications to be routed to VBs.

The second recommendation is a truing up credit generation with actual reductions. This recommend includes both a true up while generating credits using the temporary pathway and an annual true up during the annual fuel pathway report process. This recommendation would allow alternative fuel producers to make improvements to their production process that improve their carbon intensity and generate credits on of the reductions achieved. Under the current regulation, if an alternative fuel producer were to make an improvement that did improve the carbon intensity, it would take over two years for the producer to see any benefits and they would not generate credits on the additional emission reductions achieved in the interim. This loss of credit

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generation is a barrier to implementing process improvements that require the additional credit generation to offset the incremental costs.

Conclusion

The ultimate goal of California and the market participants, like Brightmark, is decarbonization and eventual carbon neutrality of not only transportation, but all sectors of the economy.

To reach this goal, California needs negative CI fuels for transportation and negative CI biogas for other uses (power, thermal, etc.). In-state and out-of-state RNG production is connected, the same developers that develop instate projects, develop out-of-state projects. The success of current RNG production will lead to the success of developing additional RNG projects necessary to decarbonize the non-transportation sectors to achieve long-term goals.

Negative CI fuels require significant economic incentives and market certainty, which has eroded with current LCFS prices and the current stroke of the pen risk from the introduction of these potential provisions for biomethane.

A strong signal by dramatically increasing the LCFS reduction targets and rejecting the proposed biomethane provisions could help return certainty back to the market.

Respectfully Submitted,

Bob Powell,
Founder & CEO