



December 21, 2022

Rajinder Sahota
Deputy Executive Officer

California Air Resources Board
Low Carbon Fuel Standard Program
1001 I St.
Sacramento, CA 95814

Comments in Response to the November 9th Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard

Dear Ms. Sahota,

NLC Energy, a developer, owner and operator of biomethane facilities in the U.S., is pleased to provide these comments on the November 9th Public Workshop on the Low Carbon Fuel Standard (LCFS) conducted by the staff of the California Air Resources Board. By way of background, we operate a facility in Denmark, Wisconsin that currently creates pipeline quality biomethane from manure supplied by 12 small, family-owned dairies. This biomethane is now being sold to UPS in California and is generating LCFS credits. This facility abates methane emissions from manure lagoons at each of these dairies and provides these dairies with badly needed additional revenue. NLC Energy is actively looking to develop other facilities that would create biomethane for the LCFS program. We would like to thank CARB for the opportunity to respond to the potential changes to the LCFS program discussed during the November 9th workshop.

As discussed below, we strongly support the need for a more stringent LCFS and recommend CARB implement a target of at least a 30 percent reduction in carbon intensity by 2030 to continue to accelerate carbon reductions in the transportation sector while driving innovation and investments. Additionally, we would like to underscore potential unintended consequences that could arise from some of the concepts presented by the agency during the Nov. 9 workshop. These proposed changes include considerations to phase out new avoided methane credits by 2030 and limiting book and claim to projects situated in the “Western Natural Gas Network” after 2025. The concepts send signals to clean fuel providers that could stifle investments in critical fuels needed to achieve California’s ambitious GHG reductions.

The LCFS Can Accelerate Reductions in GHG Emissions

As highlighted during the workshop, the significant investments in alternative fuels spurred by the LCFS program have displaced over 3.1 billion gallons of petroleum fuel in 2021.¹ The LCFS is also playing a critical role to support methane abatement investments in dairies, landfills, and wastewater treatment facilities to capture methane that otherwise be emitted to the atmosphere. The LCFS program bolsters innovation by facilitating investments that focus on solutions that drive down the CI of alternative fuels, such as biomethane.

¹ [CARB Presentation](#), slide 8, November 9th Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard.



We strongly support the need for a much more stringent LCFS target for 2030 to drive innovation and accelerate GHG reductions. A tighter target will also support the State's overall climate goal of at least a 40 percent reduction in economy wide GHG's by 2030, and carbon neutrality by 2045. With the LCFS program now producing credit surpluses every quarter, accelerating the ambition of the program is also economically feasible. We encourage CARB to target at least a 30% reduction in CI by 2030 to match the ambition of the program with the new State goals, as well as the strong supply resources that the program has generated. We would also suggest that the new target begin with a significant step-down beginning in 2024 to take advantage of the current oversupply of credits.

Importance of Encouraging Further Methane Emissions Reductions

As outlined in the Scoping Plan, more aggressive action is still needed to address short-lived climate pollutants (SCLP).² SB 1383 targets a 40 percent reduction in total methane emissions, and a 40 percent reduction in dairy and livestock emissions. Methane emissions in the state have remained flat since 2013 and, based on the latest modeling that projects outcomes for mitigation strategies currently in place, California is only expected to achieve half of the SB 1383 targeted emissions reductions by 2030.³

Renewable natural gas (RNG) can play a pivotal role in avoiding methane emissions and supporting the transition to zero-emission vehicles (ZEVs). In the Scoping Plan, CARB affirms that "biomethane currently displaces fossil fuels in transportation and ... will likely continue to play a targeted role in some fleets while the transportation sector transitions to ZEVs."⁴ Renewable biomethane can also serve as a feedstock for green hydrogen, a key transportation fuel of the future for California.

At the federal level, the Biden Administration is seeking to reduce methane emissions by 30 percent by 2030, a goal established by countries in the Global Methane Pledge, and notes that manure management and landfills account for 27 percent of U.S. methane emissions.⁵

In Alternatives A and B, the staff presented scenarios that, for the first time, proposed a 2030 phase out of fuel pathways crediting avoided methane. Currently an entity which installs a digester and eliminates methane emissions would receive the full 10-year crediting period for avoided methane for the project. Staff is proposing to keep that same treatment for projects that apply until 2030 and then eliminate the recognition of the methane abatement after that date. This would result in a phaseout of fuel pathways with avoided methane by 2040.

While we welcome recognition of methane avoidance projects through 2030, we question why CARB would create an artificial cut off for these valuable projects. As discussed above, California is targeting a 40 percent reduction in methane emissions by 2030, meaning that a majority of methane emissions will continue after that date. So long as the methane abatement is not required by law, why would CARB eliminate such a successful mechanism for eliminating this potent greenhouse gas? At a minimum, we urge CARB to take comment on this limitation but postpone a decision until closer to 2030.

² CARB, [Scoping Plan](#).

³ CARB, [Scoping Plan](#).

⁴ CARB, [Scoping Plan](#).

⁵ See <https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf>



Restrictions on Book and Claim Biomethane Transactions

With consideration of dramatic new restrictions (perhaps applied retroactively) on Book and Claim biomethane transactions, CARB may stifle investments in critical clean fuels that are needed to achieve California's ambitious GHG reductions. The staff discussion document includes references to alternatives where Book and Claim is limited to projects situated in the "Western NG network" after 2025, with no book and claim for landfill gas at all after 2030, unless it is used to create hydrogen.

Though the scenarios under consideration are intended for analysis and are not formal proposals, they send a signal to the biomethane market that places needed future investments in jeopardy. Indeed, to the extent that the limitation on Book and Claim could be applied retroactively, the limitation would dramatically increase the perceived policy risk associated with *any* investments into the LCFS program. If CARB reverses itself on eligibility for approved, working RNG projects, representing hundreds of millions of dollars of investment, it will have repercussions for investments into all alternative fuels needed by the State. Certainly, for now, new methane abatement projects by dairies, landfills, and waste water plants outside the arbitrary geographic limit, will be paused. These projects typically take two years to complete and cannot now be assured that they will be allowed to participate in the LCFS market when they are completed.

As noted above, rigorous research conducted for the 2022 Scoping Plan and the LCFS supports both avoided methane emissions, as well as the key role that book and claim is playing to magnify CARB's policies beyond California's borders. These signals that have resulted in the California market driving methane reductions in Midwest states, while making a robust supply of biomethane available to California.

California currently has multiple policies in place that are reducing the demand for petroleum, including the LCFS. Further, there are numerous policies being implemented that are continuing to reduce the demand for combustion-based fuels, including renewable natural gas (e.g., Advanced Clean Truck Regulation). These policies will create demand side reductions, thus reducing consumption of RNG in the transportation sector, while the LCFS supports progressively lower CI scores for the RNG that is consumed. As such, placing additional restrictions on biomethane is not warranted or necessary.

We also view the geographic limitation proposed to be arbitrary and unfair. There is no relevant distinction between gas contractually sold (via Book and Claim) into California from Montana versus Wisconsin. The fact one is closer to California does not mean that green biomethane molecules are flowing from Montana, versus a state outside the Western Natural Gas Network. Staff did not provide any policy justification for the restriction other than to match the electric pathway. Since the physics, distribution network, reliability concerns, and commercial arrangements are totally different for electricity, we do not see any relevant reason why CARB is justified in imposing this restriction on RNG.

Thank you for the consideration of our comments. Should CARB have any questions or require any additional information, we welcome further discussion and review. We look forward to continuing to work with CARB staff on this program.

Sincerely,

Jay Riker
NLCenergy Chief Operations Officer

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