



September 21, 2023

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

Re: Support for the Low Carbon Fuel Standard

Dear Chair Randolph and Members of the California Air Resources Board,

As you consider changes to the Low Carbon Fuel Standard (LCFS), we would like to underscore several key program elements and reiterate why they are so critical for enabling industry investment to make meaningful carbon reductions in California and across the US. With a focus on transportation fuels, the LCFS has provided pathways and incentives to eliminate methane and greenhouse gas pollution from some of the most impactful sectors including dairy, livestock, waste management, and more.

Since the passage of SB 1383 in 2016, the LCFS has become the gold standard in methane and carbon reduction, while establishing California as a global climate leader. The creation of the LCFS as an incentive-based program has allowed numerous sectors to significantly reduce their carbon footprints and shift the transportation sector away from dirty, fossil-derived fuels. It has created an incredibly robust nationwide markets that is utilized by dairy farmers, municipalities, landfill operators, and others to collect biological methane-emitting waste and transform it through the use of anaerobic digesters into low carbon fuels. Otherwise, this methane would simply vent into the atmosphere, which, as you know, is a greenhouse gas 80 times more potent than carbon dioxide. Research shows that lowering methane emissions can prevent up to [0.3°C](#) of warming by 2050. We agree with Gov. Newsom, who [announced](#) in a September 20th release, that his administration is partnering with governments around the world to tackle methane. Because methane breaks down within 20 years, mitigation now will allow us to mitigate the effects of climate change in the short term.

The dairy industry voluntarily committed to capturing its methane and through the LCFS program incentives, supported an entire industry to mitigate a highly potent greenhouse gas, methane. The dairy industry has made considerable progress toward SB 1383 goals and is on track to meet those targets. According to the 2023 California Climate Investments [report](#), more than 90% of California's dairy methane emission reductions achieved so far (approximately 2.3 million metric tons of CO₂e/year) are the result of dairies voluntarily implementing anaerobic digesters.

Conversations are intensifying around the future of the LCFS from all sides of the spectrum. The American Biogas Council would like to share our insights into what has made the LCFS so effective and transformative as one of the most effective climate programs in existence.

Performance-based programs, like the LCFS, ensure robust participation in the credit markets. Any shift away from this model would drive many of the participating industries out of the state and disincentivize carbon reductions and the climate gains we have accomplished. This would be an enormous setback in our collective effort to address climate change and eliminate carbon emissions.

The GREET Model is backed by science and is the most widely accepted carbon accounting methodology.

One of the LCFS' bedrock principles is its foundation on science-based models like Argonne National Laboratory's GREET model for carbon accounting. While California utilizes a modified version called GREET+, the foundation is in its utilization of lifecycle analysis (LCA) that accounts for the carbon removed or injected into the atmosphere at every step of the process. In the case of a product like renewable natural gas (RNG), this includes avoided emissions from the degradation of organic wastes, like manure and food waste, for example, to the tailpipe emissions of a large truck on the interstate. What we know as accepted fact from the GREET model is that millions of tons of greenhouse gasses (GHG) are prevented from entering the atmosphere — and in many cases result in negative emissions.

The GREET model, and other carbon accounting models, allow for the robust examination of various technologies and innovations involved in the production and end use of renewable fuels. This critical information and data inform the important work at CARB and other agencies across the country, including the federal government's reliance on it in the Inflation Reduction Act, as each seek to make meaningful and defensible progress toward GHG reductions. The GREET model is increasingly and consistently the scientific basis and benchmark by which emerging state and federal policies can compare decarbonized fuels and measure progress.

Avoided methane crediting represents real reductions in greenhouse gas emissions.

Based on the standardized lifecycle emission modeling CARB developed a sophisticated system of avoided methane credits that are tradeable in the market, a deliberate effort to prioritize reductions in short lived climate pollutants. While staff has considered changing its treatment of avoided methane, we encourage CARB to continue recognizing the value of captured methane, from all sources, including farming operations and from organics waste diverted from landfills. Efforts to eliminate avoided methane crediting are contrary to long standing carbon accounting methodologies and contrary to the intent and requirements of SB 1383. Further, nearly 25 million gallons of low-CI feedstock is used to generate electricity, supporting the EV market, and made possible through avoided methane crediting.

The American Biogas Council strongly opposes any proposal that ignores avoided methane emissions. Recognizing avoided emissions and their role as short-lived climate pollutants, while incentivizing their removal from the atmosphere, has proven highly successful and we encourage CARB to continue a science-driven framework that utilizes proven science like Argonne National Laboratory's GREET model. Ignoring methane would also put California at odds with well respected and standardized carbon accounting, which could jeopardize the program's access to fuel supply, and further challenge the ability of CARB to meet its carbon intensity targets, due to supplies potentially exiting the LCFS market for more supportive policy environments.

The state of California is seeing the benefits of CARB's efforts, and the deliberate prioritization of short-lived climate pollutants like methane. Biogas and RNG systems, especially those partnering with dairies and landfills are a big reason why.

A carbon intensity (CI) reduction target of 40% to 50% in 2030 is possible and would accelerate California's climate goals.

The results of the previously mentioned lifecycle emissions analysis, and GREET modeling is a fuel's carbon intensity or "CI" score, the benchmark by which the LCFS program sets and measures its GHG reductions. Reductions in these benchmarks are the cornerstone of the LCFS program, with the ultimate goal of reaching a reduction of 85% of emissions relative to 1990 levels. The current 2030 goal is to reach a 20% reduction, per the 2022 Scoping Plan Update. Staff has recently proposed various scenarios with a 30% reduction by 2030 included in the recently released SRIA. Gov. Newsom highlighted in his recent release that California set a goal of 40% total emissions reductions by 2030.

The ABC is committed to reaching this goal and believes California can achieve greater CI reductions than CARB has proposed in the SRIA — faster, when certain criteria are incorporated and in line with the Governor's goals. Continuing to recognize biomethane and avoided emissions in the LCFS allows California to accelerate their carbon reductions. We worked with peers in the industry and experts at ICF to develop research to demonstrate that a more aggressive CI reduction target is possible, up to 42% target by 2030 with existing policies. Now is the time to accelerate these efforts to reach California's aggressive climate goals. But arbitrarily ignoring the valuable reduction opportunities in particular sectors like dairies and landfills restricts CARB's ability to move swiftly and aggressively on climate targets.

Biomethane Book & Claim is consistent with renewable electricity standards and supports robust supply.

Book & Claim has allowed the LCFS to flourish as producers have flocked to California's LCFS and helped it become one of the most robust carbon reduction programs in the country. To this point, CARB has allowed indirect accounting, which is consistent with deliverability requirements for renewable electricity in jurisdictions across the country. By limiting participation to physical deliverability of biomethane, the LCFS will reduce its footprint and effectiveness as a carbon reduction program, undermining the nation's transition to a low-carbon economy. Similar to the avoided emissions credits, implementing strict deliverability requirements is contrary to national precedent and inconsistent with accepted, market-based tracking.

The LCFS continues to drive investments in low carbon fuels and sound environmental policy. The American Biogas Council and its hundreds of members are proud to help drive this progress and are committed to CARB's efforts to eliminate methane.

We encourage CARB to continue to provide the incentives needed to ensure dairy and other methane reductions are achieved. We are proud of the climate progress we have been able to achieve together and look forward to a continued partnership that will help California continue to lead the nation and world in tackling climate change.

Thank you for your consideration and the opportunity to share our support of the LCFS with CARB.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick Serfass". The signature is fluid and cursive, with the first name "Patrick" being more legible than the last name "Serfass".

Patrick Serfass
Executive Director

About the American Biogas Council

The American Biogas Council is the voice of the US biogas industry dedicated to maximizing carbon reduction and economic growth using biogas systems. We represent 400 companies in all parts of the biogas supply chain who are leading the way to a better future by maximizing all the positive environmental and economic impacts biogas systems offer when they recycle organic material into renewable energy and soil products. Learn more online at www.AmericanBiogasCouncil.org, Twitter [@ambiogascouncil](https://twitter.com/ambiogascouncil), and [LinkedIn](#)