



July 12, 2023

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

Re: Draft Proposed Changes for Tier 1 Simplified Carbon Intensity Calculators

On behalf of the American Biogas Council and biogas producers, members, and stakeholder organizations, we are writing to offer constructive commentary in response to the Draft Proposed Changes for Tier 1 Simplified Carbon Intensity (CI) Calculators and Associated Instructions Manuals. While we understand trade-offs are necessary and recognize the implicit goals to accelerate and simplify the Low Carbon Fuel Standard (LCFS) pathway application and certification process, the new calculator will have significant impacts on the biogas industry, RNG producers, and farms. The concerns with the new calculator, as articulated below, should guide California Air Resource Board (CARB) implementation of these changes while providing an opportunity to mitigate adverse effects on an industry committed to CARB's effort to fully account for greenhouse gas (GHG) emissions.

The American Biogas Council, as the leading trade association representing the biogas industry, recognizes the importance of addressing the challenges posed by waste generation, GHG emissions, and the equitable distribution of waste management infrastructure.

Biogas systems protect our air, water, and soil by recycling organic material, like food waste and manure, into renewable energy and soil products. Biogas systems are, at their heart, a biological means to capture methane that would otherwise be emitted into the atmosphere for use as a renewable fuel. Biogas systems can be a solution for organic waste generators to further protect air, water, and soil – crucial to the challenges CARB seeks to address.

We offer the following comments on the proposed Draft Tier 1 Simplified CI Calculators:

Draft Tier 1 Simplified CI Calculator Clean Out Modification

Our review of the Draft Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure indicates that these changes may reduce CARB's administrative burden and speed the LCFS pathway application and certification process by as much as 12 months. This would be a significant improvement on the current, lengthy application process and may provide more opportunities for biogas producers to bring GHG-reducing projects to fruition. However, the proposed annual modelled lagoon cleanout will significantly lower the availability of avoided emissions credits (AECs) if operators are required to model a full lagoon clean-out each year, regardless of actual frequency. Fewer AECs means there will be fewer LCFS credits available, financially constraining a significant number of existing and proposed projects. Initial analysis shows that this change could lower CI scores by as much as 40 points. These impacts will likely result in fewer projects submitted for approval, and lower GHGs avoided through the LCFS program. More importantly, this anticipated decline in project development means existing manure management practices continue, as well as the continued emissions of methane to the atmosphere from those organic wastes. The model prioritizes standardization at the cost of fuel supply and environmental benefit.

This modelling assumption, if implemented, puts the results of the Tier 1 calculator at odds with real, on-the-ground conditions, making the resulting avoided emissions inaccurate, and underrepresented in the LCFS program. The reality is that manure storage and management systems are diverse, and each industry operates under different standards. For example, dairy and swine systems, simply due to the inherent nature of the species, feed, and solids content of manure, require very different manure management systems, resulting in drastically different lagoon clean-out schedules. Couple this variability with crop and other land management strategies, and the diversity of manure clean out strategies expands further. We recognize that a simple model cannot account for every potential combination of systems and schedules; and while CARB's intent may have been to standardize this variability using the Tier 1 model, the result is an arbitrary, assumed frequency that is inconsistent with existing standards, unnecessarily ignoring real avoided emission benefits provided by biogas and RNG systems.

We recommend the following with respect to treatment of lagoon clean outs:

- **Keep the existing policies and procedures in place and initiate a study:** The proposed requirement to model annual lagoon cleanouts is impactful to fuel supply coming to the LCFS market, to the overall emissions accounting of the program, and to the agriculture and energy industries more broadly; yet, no analysis nor supporting data was utilized to guide CARB to the 1 year benchmark as a standard. A study should be completed to evaluate current practices within each specific segment (swine, dairy, beef), determine a clean out standard that best reflects each segment separately and represents the majority of systems in each segment. The study should also include an impact analysis outlining how the reduction in avoided emission credits will impact fuel supply, market pricing, and the ability of LCFS to achieve its CI reduction targets. The analysis will enable CARB to determine the appropriate changes, if any, to the Tier 1 Dairy/Swine Manure Calculator, including whether it should include an obligatory, across-the-board annual complete lagoon clean-out lagoon. Having the actual data will provide CARB with the information to scientifically support future LCFS Tier 1 applications from dairy and swine operations.
- **Establish a standard clean-out for each manure type that better aligns with real world operations:** As noted, there is a wide range of timelines employed by farms in their manure and lagoon management strategies. An annual modeling assumption is not reflective of this reality. Under its existing model, CARB could still require applicants to model a full clean out, at a more realistic frequency, nearer to their operation. There is a middle ground between annual clean outs and zero clean outs, and allowing applicants to select a different frequency can still accomplish a model that is more accurate and aligned with operations.

Implementation and Timing

To implement the Draft Tier 1 Simplified CI Calculators smoothly and efficiently, **we request CARB delay implementation for one year and clearly establish that projects submitted prior to the effective date of the new calculator (e.g., January 2024 or 2025), are still under the auspices of the current Tier 1 Calculators until the following calendar year.** Significant calculations and analysis under these calculators are still in process and requiring projects to re-calculate after submitting the project would incur additional burden and costs. We believe this clarification would benefit both the industry and CARB in clearly outlining which calculator is applicable to the project.

Further, the American Biogas Council would like to recommend additional changes by CARB to improve the Tier 1 Calculator and improve GHG accounting:

- **Power Generation for Electric Vehicle (EV) Use as a Finished Fuel Should Include Biomethane Pathways:** All Tier 1 Calculators should allow electricity generation from biomethane sources to enable matching with EVs. Another approach would be for CARB to develop a separate Tier 1 calculator specifically for biomethane as an input for conversion to electricity for use in EVs. The transportation sector remains one of the hardest sectors to decarbonize and the development of additional Tier 1 Calculators would expand biogas use beyond natural gas vehicles and help mitigate GHG emissions.
- **Credit True-up to Fully Recognize GHG Benefits of Biomethane Production:** As others have proposed, we believe a crediting true-up should be offered to fully realize biogas and RNG production benefits by analyzing actual and verified CI performance rather than forecasting future CI performance. This change will mitigate unexpected impacts outside the control of facility operators.

The ABC appreciates the opportunity to comment on this proposal and your consideration of these comments.

Sincerely,



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 more than 370 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](https://www.linkedin.com/company/ambiogascouncil/).