Bioenergy Association of California

April 23, 2018

Mr. Sam Wade
Chief, Transportations Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Proposed Amendments to LCFS Regulations

Dear Mr. Wade:

The Bioenergy Association of California (BAC) submits these comments on the March 2018 draft of proposed amendments to the LCFS regulations. BAC supports many of the proposed changes, but objects to several of the changes that would impede the state's progress in reducing Short-Lived Climate Pollutants and meeting the biofuels goals in the 2030 Scoping Plan Update. BAC's comments focus on the following issues:

1. The reduction in the 2020 carbon intensity target is too drastic and will cause significant market disruption.
2. The definition of biomethane is not accurate, would significantly increase the cost of many biomethane projects, and would disadvantage instate biomethane producers.
3. The Temporary Fuel Pathways for dairy, diverted organic waste and wastewater biogas are unnecessarily conservative.
4. Biomethane from all sources should be included in Tier 1 pathways.
5. Projects should be allowed to claim both LCFS and Carbon Offset Credits, provided they do not claim both credits for the same fuel.
6. The increased carbon intensity target for 2030 is feasible and will provide many benefits.

BAC represents the fuel providers that are providing the very lowest carbon intensity fuels in the entire LCFS program, including biomethane producers using dairy manure and diverted organic waste. BAC members include more than 70 public agencies, private companies, local governments, utilities, environmental groups, investors and others working to convert organic waste to energy. BAC's public sector members include air quality, environmental, wastewater, solid waste, economic development, public utility, and other agencies. BAC's private

sector members include energy and waste management companies, agriculture and dairies, investors, technology providers, and more.

BAC submits these comments to ensure that California continue to increase the use of biomethane for vehicle fuel use to help meet the state's Short-Lived Climate Pollutant and air quality goals.

1. **The reduction in the 2020 carbon intensity target is too drastic and will cause significant market disruption.**

As noted above, BAC members are producing many of the lowest carbon fuels participating in the LCFS program, including most of the state's dairy and diverted organic waste to fuel projects. In order to meet the state's Short-Lived Climate Pollutant requirements, California must increase the number of these projects significantly in the next several years. SB 1383 requires diversion of 50 percent of all organic waste currently going to landfills by 2020 and 75 percent by 2025.[1] That means building 100 or more new facilities to convert that organic waste to biogas and/or compost. Converting organic waste to biomethane for vehicle fuel and composting the remainder provides several times greater greenhouse gas reductions than compost alone[2] and should be encouraged as much as possible. SB 1383 also establishes a number of requirements to reduce methane emissions from dairies, including a requirement that ARB create a pilot mechanism to guarantee the long-term value of LCFS credits.[3]

Reducing the 2020 target for carbon intensity from 10 to 7.5 percent is a drastic reduction in the market for low carbon fuels and will impair the state's efforts to meet the requirements of SB 1383, particularly the 2020 deadline for organic waste diversion. The reduced carbon intensity target will significantly reduce the value of LCFS credits and make it much more difficult to finance projects needed to convert diverted organic waste to biomethane to meet the requirements of SB 1383.

BAC urges the Air Resources Board to reduce the 2020 target to no less than 9 percent to avoid significant market disruption for the next few years.

2. **The definition of biomethane is not accurate, would increase the cost of instate projects, and would put instate projects at disadvantage.**

The proposed amendments would revise the definition of biomethane in both helpful and harmful ways, including two proposed changes that are not accurate.

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[1] Health and Safety Code section 39730.6.

[2] State of Oregon, Department of Environmental Quality, *Evaluation of Climate, Energy, and Soils Impacts of Selected Food Discards Management Systems,* October 2014. Table ES-2 shows that converting organic waste to energy and compost provides 3.5 times greater GHG reductions that compost alone. Page iii.

[3] Health and Safety Code section 39730.7 (d)(1)(B).

a. BAC agrees that the definition of biomethane should be expanded to include methane derived from gasification of organic material.

BAC supports expanding the definition of biomethane to include methane that is derived from gasification of organic material. The draft points out correctly that a number of pilot projects are converting biogas from gasification of organic waste to methane, which can be used as a vehicle fuel. Including biomethane derived from gasification of organic material would help the state to reduce black carbon from wildfires and controlled burns of forest and agricultural waste, and would help the state to meet the landfill diversion requirements of SB 1383 since a large part of organic landfill waste (wood and construction debris) is not suitable for anaerobic digestion.

b. Biomethane should NOT be required to meet pipeline standards unless it will be injected into a utility pipeline.

BAC strongly objects to two other changes to the definition of "biomethane." Most importantly, biomethane under the LCFS should not be required to meet utility pipeline standards. At least two biomethane producers that participate in the LCFS program are using the biomethane to fuel vehicles onsite: the CR&R project in Riverside County and the South San Francisco Scavenger project, which are using biomethane from diverted organic waste to fuel garbage trucks and other vehicles onsite. Why should those biomethane producers be required to meet pipeline standards to be eligible for the LCFS, when the biomethane doesn't have to go in the pipeline? The LCFS is a vehicle fuel program, not a pipeline injection program.

Requiring biomethane to meet pipeline standards would also put instate biomethane producers at even greater disadvantage compared to out of state biomethane producers. The California Public Utilities Commission adopted the most stringent standards in the country pursuant to AB 1900 (Gatto, 2012). Those standards have put California biomethane producers at a severe disadvantage compared to biomethane producers that can inject into pipelines in other states, which is why the state enacted SB 840 in 2016 to require the CPUC to revisit some of the pipeline biogas standards.[4] Requiring biomethane under the LCFS to meet pipeline standards – whether or not the biomethane needs to be injected into a utility pipeline - is overly restrictive and will hurt the instate producers who are needed to meet the requirements of SB 1383.

c. The proposed definition of biomethane is wrong to equate biomethane and RNG, which overlap but are not always the same.

The proposed definition is also incorrect to equate biomethane with Renewable Natural Gas. RNG is a broader term that can include Power to Gas and other forms of renewable natural gas substitutes that are not derived from biological

[4] SB 840, section 11, adding Public Utilities Code section 784.1.

sources. It makes no sense to call Power to Gas made from renewable power and water "biomethane" when it does not come from organic material.

BAC recommends, therefore, that the definition of biomethane include the methane derived from biological (organic) material, regardless of conversion method, and that it be required to meet vehicle engine standards, not utility pipeline standards. BAC also recommends removing the statements that "biomethane" and RNG are interchangeable, which they are not.

3. **The Temporary Fuel Pathways for dairy, diverted organic waste and wastewater biogas are unnecessarily conservative.**

BAC agrees with the comments of Clean Energy that the proposed Temporary Fuel Pathways for dairy and wastewater biogas are unnecessarily conservative and will make it harder to finance new projects. Given the urgency of constructing new dairy digesters and expanding capacity at wastewater facilities to convert diverted organic waste to energy, we urge the Air Board to adopt Temporary Fuel Pathways that are closer to the carbon intensity levels that have been certified for recent projects in these sectors. For instance, dairy biomethane has been certified at negative 276, but the Temporary Fuel Pathway would assign it a temporary carbon intensity of zero. There is no basis for adopting Temporary Fuel Pathways with so much higher carbon intensity values. This will cause much higher levels of uncertainty for projects and, especially, for project financing.

BAC recommends that Temporary Fuel Pathways be no more than ten percent higher carbon intensity than the average of projects in the same sector that have been certified by the Air Resources Board.

4. **Biomethane from all sources should be included in Tier 1 pathways.**

BAC agrees with the concerns raised by the California Association of Sanitation Agencies about the classification of biomethane from sources other than landfill gas as Tier 2, which subjects most instate biomethane to much more onerous requirements. As CASA notes in its comments:

> Section 95488.1(d) – Defines fuel pathways which must fall under Tier 2 classification and sub (2) includes: Biomethane from sources other than landfill gas. Furthermore it states that the Tier 2 pathway classification shall apply to fuel pathways that the Board's staff has limited experience evaluating and certifying. Staff worked diligently to develop specific pathways for mesophilic digestion of sewage sludge at wastewater treatment plants and have now developed a simplified calculator which they intend to introduce during a 15 day amendment once this rule is finalized. Biomethane sources other than landfill gas should certainly be allowed as Tier 1 pathways and this seems the intent of the Air Board. Please provide clarity on how the wastewater sector can fruitfully participate in the LCFS program.

Biomethane from sources other than landfill gas is critical to reduce Short-Lived Climate Pollutants and should not, therefore, be subjected to greater requirements and costs than other low carbon fuels.

5. **Projects should be allowed to claim both LCFS and Carbon Offset Credits, provided they do not claim both credits for the same fuel.**

BAC appreciates the need to avoid double-counting of carbon reductions, but there is no need to prohibit projects from receiving both LCFS and carbon offset credits as long as they are not claiming both credits for the same fuel. Forcing projects to choose all of one or the other type of end use and credit will make compliance with the LCFS much more expensive and harder to meet the methane reduction requirements of SB 1383.

In many cases, biomethane projects will be most cost-effective if they use some of the biomethane or biogas for onsite power, heating or cooling, while some of it is used for vehicle fueling. For example, many wastewater treatment plants use the biogas that they produce for onsite power generation, but they have capacity to take diverted organic waste as well, often more cost-effectively than stand-alone facilities. In some cases, dairy digesters and other projects will be more cost effective if they use some of the biomethane produced for onsite power, heating or cooling, and use other biomethane for vehicle fuel. As long as individual projects provide adequate tracking and verification, there is no reason to force projects to choose this "all or nothing" framework where they must dedicate all the biomethane to either vehicle or to other end uses.

BAC urges ARB to revise this requirement to allow multiple end uses for biomethane so long as those end uses -and the credits that projects would otherwise be allowed by law to receive – are clearly tracked and verified.

6. **The increased carbon intensity target for 2030 is feasible and will provide many benefits.**

BAC supports increasing the 2030 target to a 20 percent reduction in carbon intensity. Recent studies by Cerulogy and others have shown that that is a feasible target and will help the state to achieve its 2030 climate goals.[5]

Thank you for your consideration of these comments.

Sincerely,

Julia A. Levin
Executive Director

[5] https://nextgenamerica.org/wp-content/uploads/2018/03/Cerulogy_Californias-clean-fuel-future_March2018-1.pdf.