Dairy Cares Technical Comments on the Proposed Low Carbon Fuel Standard Amendments

February 20, 2024

Dairy Cares[1] appreciates the opportunity to provide these comments on the California Air Resources Board's ("CARB") proposed Low Carbon Fuel Standard ("LCFS") amendments ("Amendments"). Dairy Cares represents the California dairy sector, including dairy producer organizations, leading cooperatives, and major dairy processors. We appreciate CARB's efforts to lead a robust stakeholder process and its efforts to prepare a voluminous record in support of the proposed revisions to the LCFS. These comments focus on the biomethane crediting provisions. Our comments are summarized as follows:

1. Dairy Cares is broadly supportive of the proposed amendments, including updates to the environmental targets and alignment with Short Lived Climate Pollutant ("SLCP") reduction laws.

2. The Amendments impose an overly-broad phase-out timeline for biomethane crediting. CARB should revise these requirements and retain discretion to align implementation of crediting pathways under the LCFS with its statutory obligations under SB 1383.

DISCUSSION

1. Ongoing Crediting for Anaerobic Digester Projects Is Necessary to Meet the Statutory Requirements of SB 1383.

Greenhouse gas ("GHG") emissions are global pollutants, and it is important for CARB to demonstrate that its programs can harmonize environmental goals and protect the state's economy, consistent with the statutory requirements for the LCFS. Section 38560 of the California Health and Safety Code directs CARB to adopt regulations that achieve the "maximum technologically feasible and cost-effective" greenhouse emission reductions. Consistent with these requirements and the regulatory programs adopted to date, California's dairy farming families clearly recognize the importance of reducing GHG emissions and are

[1] For more information about Dairy Cares, please visit www.dairycares.com.

striving to advance many new in-state projects that reduce potent SLCP emissions. These projects are attributable to the signals provided by the LCFS. As a result of this important program, dairy farmers are able to reduce emissions and enhance the environment and economic stability of their farms. The LCFS plays a key role in justifying the investments needed to achieve SLCP reductions. In the face of anti-dairy activism, we greatly appreciate CARB's ongoing efforts to analyze factual evidence and understand the importance of voluntary programs like the LCFS to achieving the statutory mandates under SB 1383.

The LCFS is part of a comprehensive strategy for all types of GHG reductions, and the proposed Amendments follow through on CARB's previously stated intention to create a comprehensive plan to reduce SLCP emissions. We applaud CARB for its leadership and understanding the potential for California's bold action to have far-reaching impacts on a global scale:

> By developing a comprehensive plan to achieve necessary SLCP emission reductions in an effective and beneficial way, California can foster broader action beyond its borders and demonstrate effective processes and strategies to address climate change.[2]

The agency's 2022 Scoping Plan Update correctly recognized that, given the urgency of climate change and avoiding climate tipping points as identified in the recent Intergovernmental Panel on Climate Change assessment, efforts to reduce SLCPs are especially important right now.[3] The 2022 Scoping Plan Update accounted for the full 40% reduction in SLCPs by 2030, to achieve the overall reductions in GHGs by 2030 sought by the Plan. The 2022 Scoping Plan Update identified that "[i]nstall[ing] state of the art anaerobic digesters that maximize air and water quality protection, maximize biomethane capture, and direct biomethane to sectors that are hard to decarbonize or as a feedstock for energy" as a key strategy for successfully achieving reductions in dairy and livestock methane.[4]

Since then, it has become increasingly clear that global demand for dairy and meat is expected to increase significantly in the coming years. According to an analysis recently published by the Food and Agriculture Organization of the United Nations, by 2050, the growing and more affluent global population is anticipated to drive a 20 percent increase in animal

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[2] CARB's Short-Lived Climate Pollutant Reduction Strategy (March 2017), p. 106, available at: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf.

[3] IPCC, 2022: Summary for Policymakers [P.R. Shukla, J. Skea, A. Reisinger, R. Slade, R. Fradera, M. Pathak, A. Al Khourdajie, M. Belkacemi, R. van Diemen, A. Hasija, G. Lisboa, S. Luz, J. Malley, D. McCollum, S. Some, P. Vyas, (eds.)]. In: *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001.

[4] CARB's 2022 Scoping Plan for Achieving Carbon Neutrality, p. 232, available at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

product demand for animal products [sic] compared to 2020 levels. Without intervention, this upward trend could result in increased emissions from livestock systems, potentially undermining efforts to reduce GHG emissions and exacerbating global temperature rises.[5]

CARB has extensively evaluated the role the LCFS plays in California's ability to achieve the SLCP reductions called for in Senate Bill ("SB") 1383, and the findings have consistently supported CARB's own conclusion that "the LCFS facilitates significant private investment in technologies that provide the methane reductions from dairy, livestock manure, organic waste, and landfill management operations called for by SB 1383."[6] The productive use of dairy biomethane is the primary strategy that is reducing SLCP emissions, as required by SB 1383..

Arguments that the LCFS will directly lead to larger dairy herd populations should be rejected. Allegations of incentives to increase herds solely due to the LCFS are unsupported. In fact, reductions in total herd size continue to occur. This is especially apparent in Tulare County, which is the largest dairy producing county in the nation and location of many of the dairy digester projects that have already contributed to considerable methane reductions in California. A March 2023 report produced by Tulare County shows that milk cow populations in Tulare County decreased by nearly 15% during the same period that 39 digester projects began operations and another 13 were in planning and development.[7] Tulare County reported significant emission reductions during this same timeframe, making clear that, in Tulare County, the presence of LCFS incentives clearly did not increase total herd populations or otherwise alter the ongoing trend of herd reductions and consolidation in California's dairy industry.

Unfortunately, anti-dairy activists continue their misguided efforts to call for a complete change of course on the State's SLCP Reduction goals. Some have called for forced conversion to pasture-based operations, direct regulation of dairy farms, and immediate phase outs of dairy digester incentives. These proposals will not only fail to achieve the desired greenhouse gas emission reductions but will also exacerbate the problem by causing significant emissions "leakage." Command and control measures for SLCP reductions in the dairy industry will accelerate dairies leaving California for states with less costly regulations and less commitment to climate protection. This outcome would be in direct conflict with CARB's mandates to minimize emission leakage in the design of its GHG programs. CARB has wisely rejected calls for immediate phase out of dairy biomethane pathways. We applaud CARB for developing a robust record on the importance of the LCFS to the achievement of SLCP emission reductions.

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[5] FAO. 2023. Pathways towards lower emissions – A global assessment of the greenhouse gas emissions and mitigation options from livestock agrifood systems. Rome https://doi.org/10.4060/cc9029en, p. x.

[6] Staff Report: Initial Statement of Reasons (December 19, 2023), p. 8, available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/isor.pdf

[7] Tulare County Annual Report of Dairy and Feedlot GHG Emissions in 2021 (March 2023) p. 8, available at: https://tularecounty.ca.gov/rma/permits/dairy/bos-agenda-item-2022-annual-report-of-total-ghg-emissions-from-dairies-feedlots-for-2021/.

2. CARB Should Not Create A Blanket 2040 Phaseout for In-state Dairy Fuel Pathways.

The Initial Statement of Reason ("ISOR") discusses the role of pipeline biomethane and that in the longer term, the State plans to shift away from biomethane as a transportation fuel source.[8] According to the ISOR, "this resource should be transitioned to other sectors. … in the long term, the existing market signals will need to transition accordingly to avoid stranded assets and the closure of methane capture projects." [9] The Amendments would phase out CNG pathways after December 31, 2040 and biomethane - hydrogen-based pathways would be phased out after December 31, 2045.

The ISOR does not identify what exactly the long-term tool will be once these phase-out dates take effect. Similarly, the ISOR does not address how, if at all, the Amendments would continue to support SLCP reductions after the phase out. We are concerned that in the absence of an ongoing financial signal, there could be project failure, which would risk increasing SLCP emissions. Smaller projects that naturally have longer pay-back periods (i.e., due to economies of scale in digester development), may not be undertaken at all. This is possible, particularly in light of the fact that in the period of 2025-30, out-of-state dairy projects will enjoy a permanent exemption from the new deliverability requirements, so long as the developer breaks ground before 2030. We are concerned that project developers will focus their efforts on locking in incentives for out-of-state projects, while smaller in-state projects are overlooked and face relatively short financial pay-back periods. There is important hydrogen-related fuel development occurring in the dairy sector that we are hopeful will qualify these concerns, but based on what we know now, more must be done to support SLCP reductions at smaller in-state dairies.

For this rulemaking, CARB should supplement the record and address how it will ensure that in-state dairies have access to financial capital needed to make long-term investments. CARB should qualify the uniform application of the proposed phase-out dates for biomethane pathways. The Tier 2 pathway application process should provide an opportunity to address unique circumstances, particularly those of smaller dairies that may require longer crediting periods to attract financing. Dairy Cares urges CARB to take a more nuanced approach and allow projects that will reduce emissions sources covered by SB 1383 to request an extension to the phaseout timelines through the tier 2 pathway application process.

CONCLUSION

Dairy Cares appreciates the opportunity to comment on this rulemaking and looks forward to continuing to partner with CARB and other stakeholders on the implementation of the Amendments and the successful achievement of the State's climate goals.

[8] *Id.*, p. 30.

[9] Id.

CARB and other leading climate researchers have concluded that dairy digester development is a necessity if the State has any hope of fulfilling its role as a world leader in the climate community. The need is acute for CARB to demonstrate to California dairy farmers that there are viable tools and long-term financial markets available for them to justify investing in long-term emission reduction solutions at their farms. This is particularly true now that LCFS prices have declined in recent years. The 2022 Scoping Plan Update provides guidance to CARB and other responsible agencies on how individual regulatory programs, such as the LCFS, are needed to ensure that the State's programs, such as the SLCP Plan, collectively achieve the emission reduction targets. Market mechanisms such as the LCFS are incredibly important to successfully protect SLCP project financing. The bottom line is that without markets for beneficial use of captured biomethane, projects will not be financed and built.

Dairy Cares encourages CARB to continue setting an example for the rest of the country by following the SLCP reduction guidelines established in SB 1383. The statute is clear in its direction to minimize leakage, and other states certainly will not follow California's lead if heavy-handed direct regulatory action is taken that causes dairy farmers to lose confidence in the program. Concern for direct regulation could lead to businesses leaving the state, increasing emissions elsewhere. This result is not only at odds with California's requirements for minimizing leakage pursuant to Assembly Bill 32, but also with the achievement of the SB 1383 targets and the state's overall climate goals.