July 14, 2021

Rajinder Sahota
Deputy Executive Officer, Climate Change & Research
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target

Dear Ms. Sahota,

The Coalition for Renewable Natural Gas (RNG Coalition)[1] offers the following comments in response to the California Air Resources Board's (CARB) recent draft report, *Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions* (Draft Report). Our industry appreciates the ongoing work by CARB, California Department of Food and Agriculture (CDFA), and their sister agencies supporting the increased development and utilization of biogas, renewable natural gas (RNG), alternative manure management practices, and other strategies to mitigate short-lived climate pollutants (SLCP)—primarily methane—from the State's agricultural sectors.

CARB's Draft Report, in tandem with other efforts underway—including the 2022 Scoping Plan development process[2]—present a unique opportunity for California's agencies to develop a long-term plan for motivating the necessary changes in the dairy and livestock sectors to contribute toward achieving the State's broader vision of carbon neutrality. As described in the Draft Report, RNG will be a significant part of addressing emissions from these activities.

About the RNG Coalition

The RNG Coalition is the trade association for the RNG industry in the United States and Canada. Our diverse membership is comprised of leading companies across the RNG supply chain, including those responsible for extensive reductions in greenhouse gas (GHG) from California's agricultural sector. Together we advocate for the sustainable development, deployment, and utilization of RNG, so that present and future generations have access to domestic, renewable, clean fuel and energy across North America.

Ag Digesters Remain a Critical and Cost Effective Decarbonization Strategy

The Draft Report is very clear that significant additional agricultural anaerobic digester (AD) project development will need to occur in California between now and 2030. The Report's finding that an additional 4.4 $MMTCO_2e$ in required methane emissions reductions could be accomplished through some combination of AD and alternative manure management projects (Scenario 3),[3] with between 210

[1] http://www.rngcoalition.com/

[2] https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan

[3] Draft Report, pg. 21.

and 230 additional AD projects required, is a very helpful conclusion.[4] We also appreciate the ongoing clarification from CARB and CDFA that the existing AD projects have delivered some of the most cost-effective GHG reductions to date.[5]

Preference for Continued Support Through Credit Market Programs

As noted in the Draft Report, "SB 1383 intends to prioritize the use of voluntary and incentive-based measures to achieve [agricultural sector GHG] reductions before regulations are implemented",[6] and "CARB is only authorized to implement the regulations to meet the 2030 target after January 1, 2024, provided that CARB and CDFA determine the regulations are technologically and economically feasible, cost-effective, include provisions to minimize and mitigate potential leakage, and include an evaluation of the achievements made by incentive-based programs".[7]

To date, California's agencies have successfully developed several tradeable-credit-based programs which have become world-leading methods of promoting GHG reductions. The RNG Coalition supports continued reliance on such programs. Specifically, California's Low Carbon Fuel Standard (LCFS) program, in tandem with the Renewable Portfolio Standard (RPS), have been some of the most important historical drivers for our industry. These approaches are being adopted by other states and nations because of their innovative policy design and proven track record in California.

Accordingly, we appreciate CARB's acknowledgement of the need for strengthening these successful long-term policies and the need to diversify RNG/biogas end uses.[8] As a primary driver of agricultural sector decarbonization to date, it will be crucial for CARB to strengthen LCFS carbon reduction targets from 2031 through 2045, and to clearly signal the proposed increase in stringency as early as possible in the 2022 Scoping Plan process.

Promote Strong Incentives for RNG/Biogas Across All End Uses

Based on the large variability in feedstocks, project location, uncertainties surrounding emerging technologies, and the benefits of a dispatchable resource in various sectors, RNG Coalition believes that the highest and best use of the bioresources that can be converted to RNG is not yet known, but the fact that we must use these resources constructively should no longer be in question. We'd also note that the Draft Report is clear that, from both an air quality[9] and efficient use of energy[10] perspective, pipeline-injected RNG should often be preferred.[11]

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[4] Draft Report, pg. 11.

[5] Draft Report, pg. 15.

[6] Draft Report, pg. 2.

[7] Draft Report, pg. ES-4.

[8] Draft Report, pg. 34.

[9] https://ww2.arb.ca.gov/sites/default/files/2020-07/dairy-emissions-matrix-113018.pdf

[10] See footnote 56 on page 29 of the Draft Report.

[11] Pipeline interconnection also increases the optionality to switch the bio resource associated with manure management toward different end uses over time, as needed.

Given that the highest and best use will likely change over time with the evolution of our energy system, it remains important to continue to incentivize and develop well-coordinated programs to promote RNG use across all sectors. RNG Coalition believes that the level of financial support provided by the LCFS will be sufficient to build out the majority of feasible pipeline connected RNG supply[12] but also that transportation end uses are not the only sector that needs access to RNG as a decarbonization option. Therefore, near-term regulatory changes to promote AD projects should be to strengthen the LCFS targets and to improve the level of incentives for use of the ag-biomass resource in non-transportation sectors.[13]

As the RPS and LCFS have successfully done for power and transportation fuels, establishing a policy (or policies) that decarbonize all gas end uses should be viewed as a necessary strategy to promote GHG reductions from all organic waste sectors, including agriculture. RNG procurement programs for core gas customers—as initiated by SB 1440—in a manner consistent with CPUC's recent whitepaper[14] represent an excellent starting point for this crucial aspect of promoting RNG use.

Continue to Develop a Pilot Financial Mechanism Using CCI Funds

The Draft Report notes that "given sufficient and sustained credit prices, most [RNG project types] can cost-effectively supply sufficient biomethane to achieve the 2030 target with no additional public incentive funding, potentially reducing the need for those resources" but also implies that additional California Climate Investment (CCI) funding may be needed to ensure that projects move forward, if the credit markets do not provide enough certainty for financial institutions to issue debt to AD projects.[15] Without sufficient funding to reach appropriate scale, less desirable conversion technologies (e.g., reciprocating engines) may be selected, resulting in greater negative local environmental impacts due to criteria pollutants from combustion.[16]

Therefore, if additional policy development is being considered, a financial mechanism,[17] such as those discussed in CARB's *SB 1383 Pilot Financial Mechanism Concept Paper* should be developed to backstop tradeable credit prices. Such a mechanism would be an efficient addition to the state's set of tools to promote these projects and should be preferred—relative to continued grant funding—to maximize the impact of a limited pool of CCI dollars.

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[12] Modeling in the Draft Report shows that 4.7 tBtu of RNG is estimated to be supplied in 2022, with approximately 13.5 tBtu needed in 2030 to meet the target, and that no technology options are feasible without incentives like the LCFS and RFS. Draft Report, pg. 25.

[13] And to handle the cases where pipeline-connection is less attractive.

[14] CPUC staff's recent whitepaper on this topic: https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Gas/SB1440_Staff_Proposal_FINAL.pdf

[15] Draft Report, pg. 32.

[16] Draft Report, pg. 23.

[17] https://ww2.arb.ca.gov/sites/default/files/classic//cc/dairy/documents/05-23-18/pilot-financial-mechanism-white-paper.pdf

Support for Improved Reporting of Activity Data from the Agricultural Space

The Draft Report explores the concept of collecting more detailed "activity data" to ensure that emissions inventories can be improved and that the full benefits of mitigation actions—including RNG projects—can be well quantified. The RNG Coalition would support such an approach, especially if constructed to minimize administrative burden and build off existing requirements, such as annual water quality reports. We believe such improved reporting will further demonstrate the methane benefits of RNG projects.

Conclusion

RNG Coalition appreciates the work undertaken by CARB and CDFA in producing this comprehensive Draft Report, which supports the increased use of RNG as a primary decarbonization solution for California's agricultural sector. The RNG industry looks forward to continuing our efforts to reduce methane emissions and believes such efforts serve as a starting point for meeting other objectives related to the larger environmental impacts of agricultural facilities.

We thank CARB and CDFA for your leadership on RNG, manure management, short lived climate pollutants and for creating policies which will serve as an example for other jurisdictions, both domestically and internationally on these issues.

Sincerely,

/S/

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