CALIFORNIA BIOENERGY
Helping dairies fuel a renewable future
324 S. Santa Fe, Suite A
Visalia, CA 93292
559-667-9560

July 14, 2021

California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814

RE: CalBio Comments on Draft Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target

California Bioenergy LLC (CalBio) appreciates the opportunity to comment on CARB's Draft Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target. CalBio is a California developer of dairy digesters generating renewable electricity and biomethane to be used for vehicle fuel. Founded in 2006, CalBio has worked closely with dairy farmers, state agencies, utilities, and the biomethane supply chain to develop programs to help the state achieve its methane reduction goals while advancing local environmental impacts. We partner with dairies to lower the environmental impact of their operations while at the same time providing a new revenue source and advancing local economic development.

CalBio generally agrees with CARB's draft analysis released in June 2021 and its findings of both the significant progress the California dairy industry has made to-date in voluntarily mitigating methane emissions and its recommendations to provide incentives to continue this progress. CalBio agrees that successful implementation of all the emission reduction strategies covered in the analysis—including anaerobic digesters, alternative manure management practices, and enteric methane mitigation strategies—will be required for California's Dairy and Livestock sector to meet its methane emissions reduction targets. CalBio also believes that the State's incentivized voluntary programs have been very successful in attracting substantial private capital to support dairy and livestock methane emission reduction projects and these additional incentive programs will remain the most effective, significant drivers of dairy methane reduction projects in California.

The incentive programs we recommend are as follows:

Maintain the Voluntary Program and Establish a Second Crediting Period for Dairy Digester Projects
The emission reductions achieved through the implementation of the Low Carbon Fuel Standard (LCFS) programs has been significant drivers in helping the state work towards

meeting its SB1383 goal of reducing methane emissions 40% below 2013 levels. The state should be commended for establishing such successful public-private partnerships for their ability to achieve methane reductions in a highly cost-effective manner. Given the results that have been seen so far, CalBio believes the program should remain voluntary and additional certainty be provided for future digester development by allowing renewal of the LCFS crediting periods. This would mitigate the financial risk associated with digester projects and significantly expand the number of projects that would be built. Absent this certainty, fewer projects will be built, potentially leaving out smaller dairies given the higher risks and longer loan and investor return periods.

Provide Additional Funding to Make Digesters on Smaller Dairies Economical

To date, CalBio's anaerobic digester projects have primarily been implemented on dairies organized in clusters where biogas from multiple dairies is piped to a centralized upgrading facility where it is cleaned up and injected into utility pipelines for use as vehicle fuel. As CalBio continues to support the State's goals by developing new digester projects, CalBio expects that future projects will be on increasingly smaller dairies and on dairies with locations that are not suitable for cluster participation. These types of projects are often more expensive to develop on a cost per cow basis. Public funding focused on smaller dairies is needed to continue to expand the dairy methane mitigation footprint by making new projects economical.

Allow for REC Trading to Make Better Use of BioMAT Program

Smaller dairies, or dairies that are unable to connect to a cluster, are often best served by installing a digester and using the captured methane to generate electricity utilizing new ultra-clean and ultra-efficient generator technology. These projects need to take advantage of both the BioMAT (for a long-term base electricity off-take) and the electric LCFS program (to optimize the value of carbon offsets). However, they are currently unable to do so. If the CPUC would permit the utility purchasing dairy BioMAT energy (or the project supplying the utility) to book and trade the resulting RECs into the electric LCFS program, then the offered price for the energy portion of the BioMAT would likely be lowered and the value to the dairy would increase, making these smaller projects more viable projects to sell RECs as electric fuel. Such an allowance would increase the financial viability of projects by providing the long-term stability of the BioMAT program while making use of the LCFS program to provide negative-CI electricity fuel.

Additional incentives should also be provided for ultra-low NO_X electricity projects such a microturbines, fuel cells, and other emerging technologies. Similarly, we would like to encourage CARB staff to work with their federal counterparts in EPA's Renewable Fuel Standard Program to authorize electric-RINs from electric fuel use.

Fund Existing and New Grant Programs

The CDFA Dairy Digester Research and Development Program has been highly effective at reducing GHG emissions per dollar spent and represents a remarkable achievement of what can be accomplished through public-private partnerships. The CDFA's Report of Funded Projects (2015-2020) demonstrates the 118 dairy digester projects to date ($195.5 million) with over

$413 million provided in matching funds by grant awardees.[1] According to CDFA, the projects funded to date have a cumulative estimated GHG reduction of 21.12 $MMTCO_2e$ over 10 years, or approximately 2.11 $MMTCO_2e$ annually.[2] Even limited grant funding attracts additional investment to be poured into the communities that need it the most, and this should be continued as the focus shifts to digesters on smaller dairies which will be necessary for the state to achieve its goals.

Grant funding is particularly necessary for smaller dairies, which also face the challenge of submitting the significant paperwork needed to compete for a CDFA grant. A more expedited grant process—perhaps based on a reservation system (tied to a project permit) and a dollar amount per milk cow paid out upon selected project milestone completions with a final payment on final completion—would help the State to achieve more GHG reductions at a highly cost-effective rate.

Replenish the 50% CPUC Biomethane Monetary Incentive Reimbursement

The $5 million per cluster reimbursement has been an important source of grant funding for dairy projects. The program should be expanded to allow existing clusters to receive funding from this program more than once to enable new dairies to be added to the existing clusters more cost effectively. The new dairies are often farther away, necessitating long gathering line extensions. In addition, new dairies will often require new compression equipment and/or interconnection expansions.

Implement Pilot Financial Mechanism

CalBio supports the concept of a pilot financial mechanism that, if implemented, could improve stability and certainty around LCFS credits generated from anaerobic digestion at dairy operations. Either of the potential approaches that allows participating facilities to receive a higher degree of certainty on the LCFS credit price reduces financial risk and will increase participation. CalBio agrees with CARB's statement that increasing revenue certainty helps project developers access private financing, potentially reducing or eliminating the need for long-term public support.

We would like to thank CARB for the opportunity to comment and we look forward to working together in the future.

Sincerely,

Andrew Craig
Vice President, GHG Operations

[1] CDFA, *Report of Funded Projects (2015-2020)* (2021 Report to the Legislature), p. 4, available at https://www.cdfa.ca.gov/oefi/ddrdp/docs/DDRDP_Report_March2021.pdf.
[2] *Ibid*.