

Dairy Subgroup #2: Fostering Markets for Digester Projects

Oversight Group
(Agency Heads)



Subgroup #1:
Non-Digesters



Subgroup #2:
Digesters



Subgroup #3:
Research



Committee Membership Breakdown

CO-CHAIRS

- Michael Boccadoro (West Coast Advisors)
- Jim Lucas (SoCalGas)
- Ryan Schuchard (CALSTART)

25 Subgroup committee members consists of representatives from...

- dairy industry
- utilities
- project development
- environmental justice
- transportation and fuel industries
- non-governmental organizations
- local government
- financial consulting
- advocacy groups
- health organizations

Subgroup 2 Developed Four Primary Deliverables

1) Dairy Methane Digester Project Expansion

Expand dairy digesters, which represent a proven and highly cost-effective way of reducing methane emissions in California. Removing barriers to ongoing dairy digester development and improving incentives for ongoing project development is critical to achieving a 40 percent reduction

2) Electricity Generation and Grid Interconnectivity

Recommendations on cost effective ways to further maximize environmental benefits and minimize impacts from projects, including market development incentives, policy development, and removing barriers

3) Pipeline-Injected Biomethane

Increase pipeline injection through market development incentives, cluster identification, policy development, removing barriers, and supporting the SB 1383 pilot project process

4) Transportation Fuel Markets

Increase dairy biogas access to all vehicle fuel markets, including market development incentives, policy development, regulatory or legislative action, and strategies to identify potential fleets and fuel networks and retailers



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Environmental Justice Concerns

- **General agreement to identify, quantify, and maximize environmental and local community benefits while minimizing any impacts**
- **Not fully aligned on full mitigation of all impacts as desired by environmental justice community**

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Final Recommendations

Deliverable 1: Dairy Methane Digester Project Expansion

Recommendations

1. Continuing Incentives

- a) Governor and Legislature should continue appropriating at least **\$100 million** annually from GGRF for each of the next several years
- b) Projects eligible for CDFA digester funding should include all low-carbon fuels, including RNG, hydrogen, DME, electricity, and other fuels with viable offtake agreements

2. Increasing in-State Production of RNG

- a) CARB should finalize, implement, and fund a pilot financial mechanism for dairy digester projects
- b) CPUC should implement SB 1440 in an expeditious manner
- c) CPUC should extend the pipeline biomethane incentive program
- d) CARB should increase and prioritize incentives to foster in-State biomethane production, refueling, and consumption

3. Community Benefits and Impacts

- a) CARB should encourage development of LCFS Program pathways for on/off-road farm equipment
- b) CARB, CDFA, and partners should implement programs to increase awareness of the benefits of RNG
- c) Local permitting agencies should continue to act as the authority for handling dairy digester permit applications
- d) The State should create additional incentives to help smaller dairies participate in digester programs
- e) The Legislature should allocate funding to identify approaches that integrate nutrient export

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Final Recommendations

Deliverable 2: Electricity generation and grid interconnectivity

Recommendations

1. The BioMAT FiT Program should be extended by the CPUC
2. The CPUC should consider revisions to BioMAT*
 - a) Explore possible ways to modify the BioMAT FIT Program that will provide greater flexibility for project operations to migrate to and from electric generation, onsite vehicle fueling, and/or pipeline injection
 - b) Explore possible ways to capture value from LCFS Program electric pathway opportunities for both procuring and producing parties

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*Pacific Gas and Electric recognizes the importance of electric generation contracts in diversifying dairy digester project financing opportunities, but does not support extension of the BioMat FiT program at this time. Pacific Gas and Electric prefers that dairy digester biomethane be utilized for pipeline injection

Final Recommendations

Deliverable 3: Pipeline Injected Biomethane

Recommendations

1. Price Stability

- a) CARB should finalize a pilot financial mechanism by the end of 2018
- b) The Legislature and State policymakers should ensure the pilot financial mechanism program is fully funded and implemented no later than January 1, 2020

2. Interconnection Cost Barriers

- a) Extend the program from 2021 to 2030 and increase funding cap to \$400 million
- b) Establish a transparent queue process to enable certainty
- c) Allow the utilities to rate-base interconnection incentives for facilities owned and operated by the utility

3. Pipeline Accessibility

- a) CPUC should explore and address the option for trucking RNG



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Final Recommendations

Deliverable 4: Transportation Fuel Markets

Recommendations

1. Dairy Fuels Pathways

- a) Legislature should allocate ~\$700M annually for MHDVs in CARB's Carbon Transportation Program
- b) Legislature should allocate additional funding for NZE/ZE trucks that can use local dairy biogas for fuel consistent with SJ APCD's proposed deployments to meet its air quality attainment goals
- c) Funding for vehicles that use renewable fuels should first benefit fuels sourced from in-state
- d) Scrappage and outgoing vehicle age requirements should be relaxed when possible

2. CNG/LNG Vehicles Cost Barriers

- a) CARB should ensure funding for Low-NOx trucks covers full cost premium over new diesel trucks
- b) CARB and other State agencies should establish multiyear dairy RNG investment framework

3. Encouraging Zero and Near-zero Emission Vehicles

- a) Incentivize investments for production and delivery of dairy manure-derived renewable electricity, hydrogen, DME, and other biofuels, and allow LCFS credits
- b) Legislature should allocate funding to expand R&D process technologies and biomethane delivery alternatives capable of producing clean, low-carbon renewable fuels from dairy manure
- c) Legislature should allocate funding to expand/enhance commercialization of technology that has completed the research and development phase, but which has not yet been brought to market

4. Vehicle Weight Exemption

- a) State should expeditiously implement a 2,000-pound statutory weight exemption for ZE/NZE trucks



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Final Recommendations

Deliverable 4: Transportation Fuel Markets

Recommendations (Cont)

3. Increasing Demand for RNG

- a) If/when the State requires MHDVs using natural gas to become ZEVs the State should seek opportunities to make up the lost RNG demand
- b) CARB should bolster demand for RNG in transportation by funding incremental cost of NZE MHDV NG vehicles in the near term, and supporting strategies to enable dairy RNG to produce LCFS and RIN credits when the RNG is used to generate electricity or hydrogen for transport over the long term
- c) CARB should encourage the transition to a higher proportion of biogas from in-State sources versus out of State

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