August 10, 2017

California Dairy and Livestock GHG Reduction Working Group 2
Mission Statements/Deliverables

Common Mission (applies to all three subgroups):

- Reinforce State's commitment to work collaboratively with sister agencies and stakeholders to significantly and quickly reduce dairy GHG emissions, identify opportunities for achieving co-benefits, support sustainable industry in California, and improve community health
- Develop common level of understanding among participants regarding:
  - Technologies, performance, and markets
  - Community concerns
  - Ongoing public processes and timelines
  - Current barriers and data gaps

Subgroup 2: Fostering Markets for Digester Projects

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Mission Statement

Subgroup 2 will establish a roadmap, attentive to the SB 1383 statute dates of July 1, 2020 and January 1, 2024, to significantly expand the number of livestock digester projects in California that support the state's climate and air quality goals. ~~.~~ The roadmap will identify both commercial ready and emerging technologies and approaches for converting manure and digestate into energy and other value added products.

The group will do this by assembling a comprehensive overview and discussion of dairy digester projects, including identification of potential impacts, benefits, and barriers to scaling up digester projects. Through the process, this subgroup will bring state agencies and stakeholders together to identify and recommend the necessary: 1) infrastructure policies, 2) procurement policies, 3) funding sources, and 4) environmental policies to achieve a sustainable model for the livestock industry.

Key Areas to be Covered:

Existing Policies and Programs

- Identification and improved integration of existing public policies, incentives and programs that support dairy digester projects

Infrastructure Policies

- Identify the infrastructure policies needed to support the rapid development of dairy digester projects
  - The CEC, in consultation with ARB and the CPUC, to develop recommendations for the development and use of renewable gas, including biomethane and biogas, as a part of its 2017 IEPR (SB 1383)
  - ARB, in consultation with the CPUC and CEC shall establish energy infrastructure development needed to encourage dairy biomethane projects (SB 1383 – by 01/01/18)
  - The CPUC to direct gas corporations to implement not less than five dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system. Gas corporations may recover in rates the reasonable cost of pipeline infrastructure (SB 1383)

Procurement Policies

- Address the need for long term energy procurement contracts for digester projects

Redline changes to 06-26-17 version

- ARB, in consultation with the CPUC and CEC to establish energy procurement policies needed to encourage dairy biomethane projects (SB 1383 – by 01/01/18)
- ARB shall develop a pilot financial mechanism to reduce the economic uncertainty associated with the value of environmental credits, including credits pursuant to the Low-Carbon Fuel Standard regulations from dairy-related projects producing low-carbon transportation fuels (SB 1383)

Funding Sources

- Address the need and requirement(s) for additional incentive funding to support the rapid development of dairy digester projects
- Opportunities and conditions required for long-term financial viability and investment

Environmental Policies

- Emissions and potential emission reduction opportunities for GHGs, criteria, toxic, and noxious pollutants

Permitting Policies

- Identify permitting barriers currently holding back sustainable dairy digester projects and recommendations for overcoming them

Other Discussion Topics

- Consideration of tradeoffs of different biogas uses, such as transportation fuel and electric power generation
- Actions needed to further develop markets for vehicle fuel, energy, soil amendments and other products derived from digestion process

Deliverables

- *Summary of Value Added Products From Manure and Digestate*
- Deliverable(s): Identification of key current and emerging technologies and approaches for converting manure and digestate into useful products including fuel/energy. The assessment will characterize products by technology readiness and outline general opportunities and issues.

- *Pipeline-injected ~~b~~Biomethane*
  Deliverable(s): Recommendations that can increase pipeline injection of biomethane, including market development incentives, cluster identification, policy development, regulatory or legislative action, removing barriers, and support the SB 1383 pilot project process.

- *~~Natural Gas Vehicle~~ Transportation Fuel Markets*
  Deliverable(s): Recommendations ~~that aid in overcoming barriers~~ to increase~~d~~ biomethane access to ~~CNG/LNG~~ all vehicle fuel markets, including market development incentives, policy development, regulatory or legislative action, removing barriers and strategies to identify potential ~~CNG/LNG~~ fleets and fuel networks/retailers.

- *Electricity Generation and Grid Interconnectivity*
  Deliverable(s): Recommendations for cost effective ways to further mitigate criteria pollutant emissions for ~~that aid in overcoming barriers to~~ on-site electricity generation projects, including market development incentives, ~~cluster identification,~~ policy development, removing barriers, and regulatory or legislative action.~~, and explore cost-effective ways to further reduce emissions.~~