California Energy Commission

2021 IEPR Workshop on Renewable Natural Gas

Melissa Jones, Senior Energy Policy Specialist

August 31, 2021

Goals for Today's Workshop

Gas Track for 2021 IEPR addressing two key areas:
- Situational awareness of emerging topics in natural gas system planning
- Refinement and development of critical analytical products necessary for gas planning

Today's Workshop focused on Renewable Natural Gas (RNG):
- Overview of RNG Market in California
- Presentations on RNG Supply, Availability, and Price
- Presentation on Policy Approaches for RNG

Previous IEPR Workshops on Gas Issues
- Gas Infrastructure – May 20, 2021
- Gas Electric Interdependencies and Aliso Canyon – July 9, 2021
- Gas Market & Price Forecasts – August 30, 2021

Anticipate future 2021 IEPR workshops on:
- Long-term Demand Scenarios
- Gas Demand Forecast

RNG In California

RNG is methane produced in a sustainable (renewable) manner

- RNG is a by-product of other processes, such as waste disposal.

- Source at dairies, landfill gas, waste water treatment, and ag waste

- End use opportunities: electricity generation, space and water heating, and transportation fuel

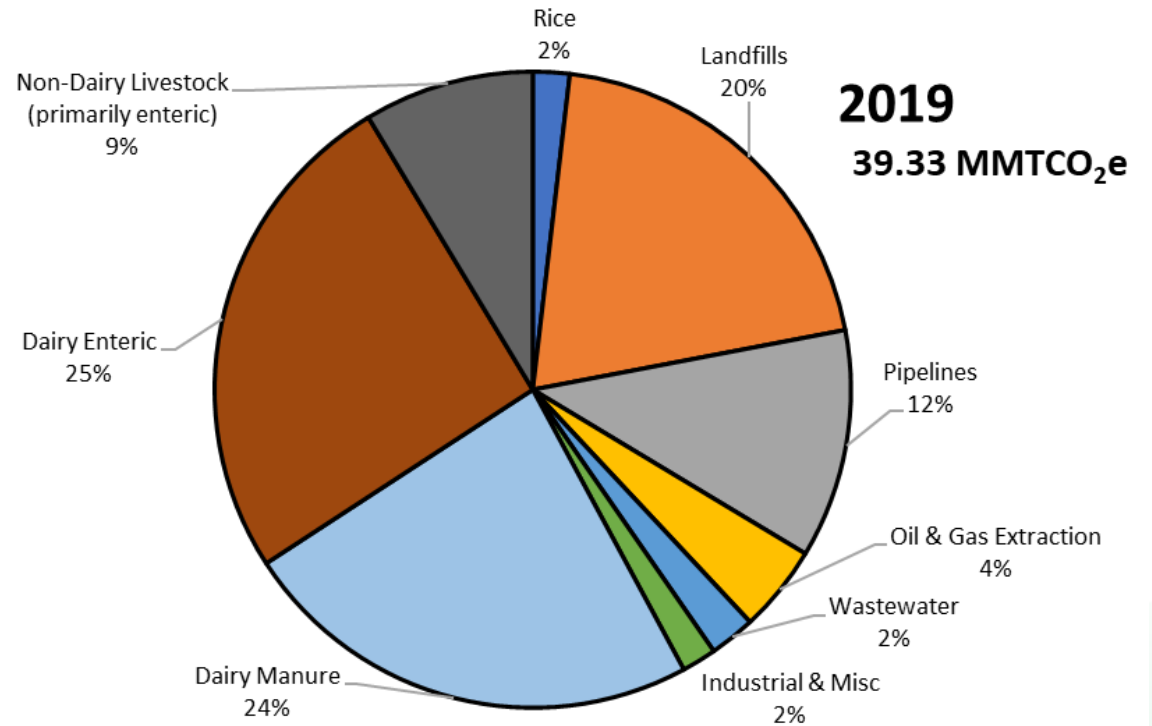- Most of CA RNG being used for transportation largely due to LCFS

RNG and GHG Emissions

- Agriculture and landfills are largest methane source; about 80% of total

- Converting waste to RNG has important societal benefit as solution to waste disposal

- Use in trucks and heavy-duty vehicles has climate benefit compared to the diesel fuel

- Injecting RNG into gas pipelines creates some methane leakage: about 12% of methane emissions

California 2019 Methane Emission Sources*

2019
39.33 MMTCO$_2$e

- Rice 2%
- Landfills 20%
- Non-Dairy Livestock (primarily enteric) 9%
- Dairy Enteric 25%
- Pipelines 12%
- Oil & Gas Extraction 4%
- Wastewater 2%
- Industrial & Misc 2%
- Dairy Manure 24%

*Using 100-yr GWP from CARB's Scoping Plan

Thank You!