



# RENEWABLE NATURAL GAS

RENEWABLE NATURAL GAS FOR DIRECT USE

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COMMISSION

# CARBON AND METHANE

Concerns about carbon and methane are driving the natural gas sector to consider renewable natural gas



# CALIFORNIA'S METHANE MANDATE

- California's Public Policy Targets Methane
- Dairy Waste A Major Methane Source
- Anaerobic Digesters Seen as Solution
- Expensive for Dairies to Comply
- California Establishes Grant Program



# DIGESTERS IN IDAHO

- Dairy Biogas Already Used As Energy in Idaho
- Idaho has 600,000 Cows that Create 65 Pounds of Waste Each Day
- Federal Mandates Benefit Existing Electricity Projects
- Pipeline Quality Natural Gas Under Consideration



# IDAHO'S FIRST PIPELINE QUALITY DIGESTER

- Dairy Digester Produced Pipeline Quality Renewable Natural Gas (RNG)
- Project Privately Funded at a Time When Natural Gas Prices Were High
- Natural Gas Prices Dropped and the Project Failed



# CONSIDERATIONS FOR DIRECT USE RNG

- The Impact of Shale Gas
- Lack of Federal Subsidies for RNG
- Dairymen Know How to Produce Milk Not Energy



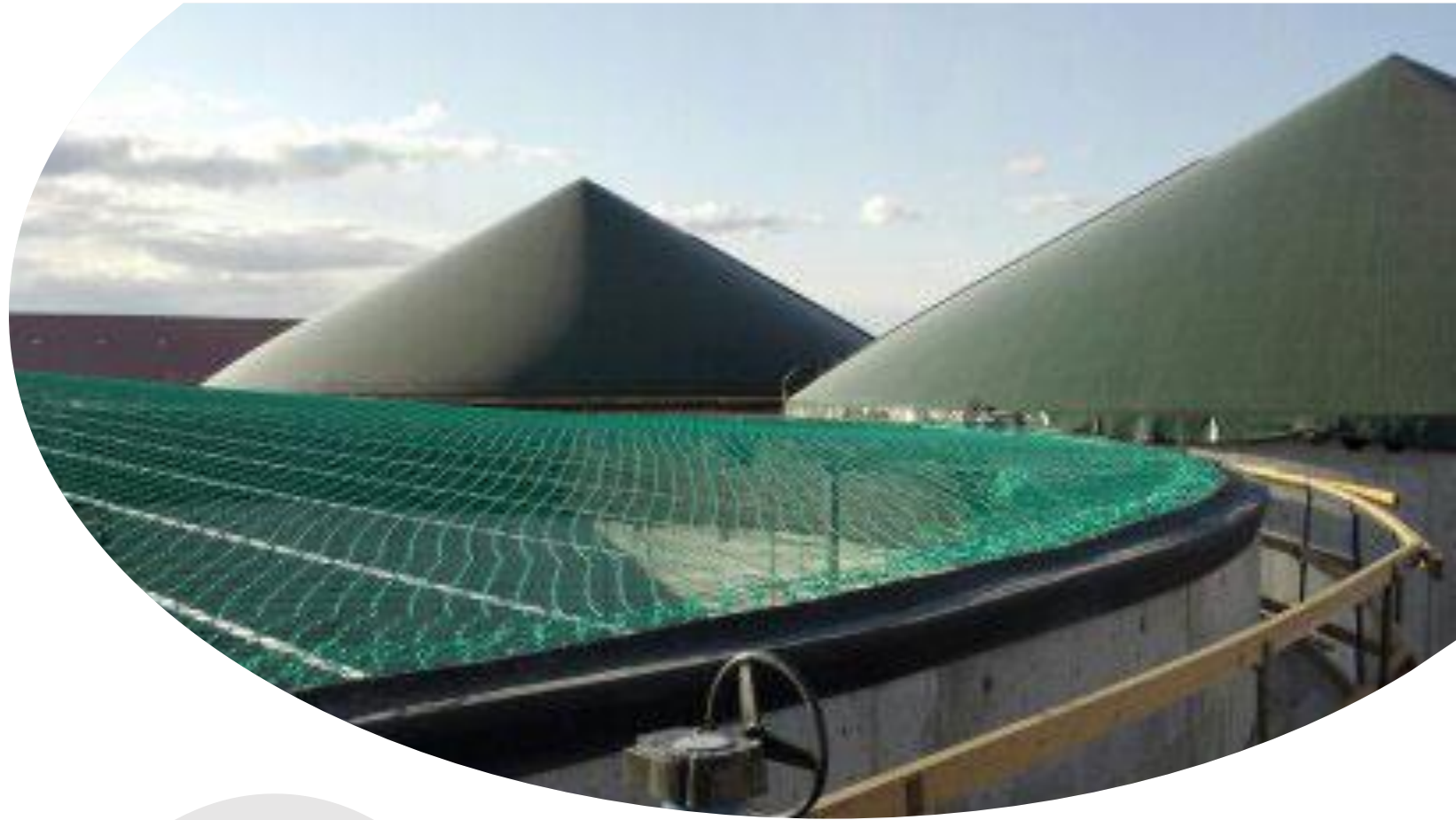
# LANDFILL GAS

- Existing Projects Produce Electricity
- Potential of Partnering With Municipal Governments



# AN ECONOMIC REGULATOR'S CONCERNS

- Who Bares the Risk?
- Is Direct Use the Best Use?







# THANK YOU



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