CDFA DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM

California Department of Food and Agriculture's Dairy Digester Research and Development Program (DDRDP) awards competitive grants to California dairy operations and digester developers for the implementation of dairy digesters that result in long-term methane emission reductions on California dairies and minimize or mitigate adverse environmental impacts.

WHAT IS A DAIRY DIGESTER?

Anaerobic digesters harness the natural process of decomposition of dairy manure to produce methane-rich biogas, which is captured to generate electricity or Renewable Compressed Natural Gas (RCNG), which is used as transportation fuel or can be directly injected into pipelines. Capturing methane, which is approximately 25 times more potent than carbon dioxide (CO₂) as a greenhouse gas (GHG), keeps it from escaping into the atmosphere and contributing to climate change.

Digester capture emissions and convert them into energy
• Reduce greenhouse gas (GHG) emissions
• Produce renewable energy
• Reduce odors and pathogens
• Provide additional revenue through production of by-products

HOW MANY PROJECTS HAVE BEEN FUNDED SO FAR?

2015: CDFA awarded $11.1 million to 6 projects that generate electricity from biogas capture. These projects provided $23.4 million in matching funds.
2017: CDFA awarded $30.7 million to 16 projects that will create RNG. These projects provided $74.2 million in matching funds.
2018: CDFA awarded $68 million to 40 projects that will create RNG. These projects provided $103.8 million in matching funds.
2019: CDFA awarded $68.6 million to 42 projects that generate electricity and RNG, plus 1 demonstration project. These projects provided $160 million in matching funds.
2020: CDFA awarded $16.5 million to 12 projects that generate RNG. These projects provided $30.8 million in matching funds.

BY THE NUMBERS

21 million metric tons of CO₂ equivalents (MTCO₂e) will be reduced over 10 years.

This is equivalent to taking 4.56 million cars off the road.

GHG emissions reductions from projects are estimated using the California Air Resources Board Quantification Methodology for the CDFA DDRDP.

Learn more at cdfa.ca.gov/oefi/DDRDP

DDRDP PROJECT RECIPIENTS MUST:

• Provide 50% cost share.
• Meet strict environmental criteria for air and water quality.
• Conduct community outreach, determine potential adverse impacts of the project and commit to mitigation measures.
• Report their verified actual GHG reductions.

Updated on March 2022
DDRDP FUNDED PROJECTS

Total estimated GHG reductions
21 million metric tons CO₂ equivalent (over 10 years)

2015 projects
6 electricity generating projects

2017 projects
16 biogas/transportation fuel digester projects

2018 projects
40 biogas/transportation fuel and electricity generation digester projects

2019 projects
42 biogas/transportation fuel and electricity generation digester projects + 1 Demonstration project

2020 projects
12 biogas/transportation fuel digester projects