



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. This is captured to generate electricity or renewable natural gas (RNG), 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.

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 create RNG. These projects provided \$74 million in matching funds.



2018 CDFA awarded \$72.4 million to 42 projects that create RNG. These projects provided \$102 million in matching funds.



2019 CDFA awarded \$69.1 million to 43 applications that generate electricity and RNG, and one Demonstration project. These projects provided \$170 million in matching funds.



Digesters 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

BY THE NUMBERS



19.9 million

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

this is equivalent to



4.2 million

cars taken off the road

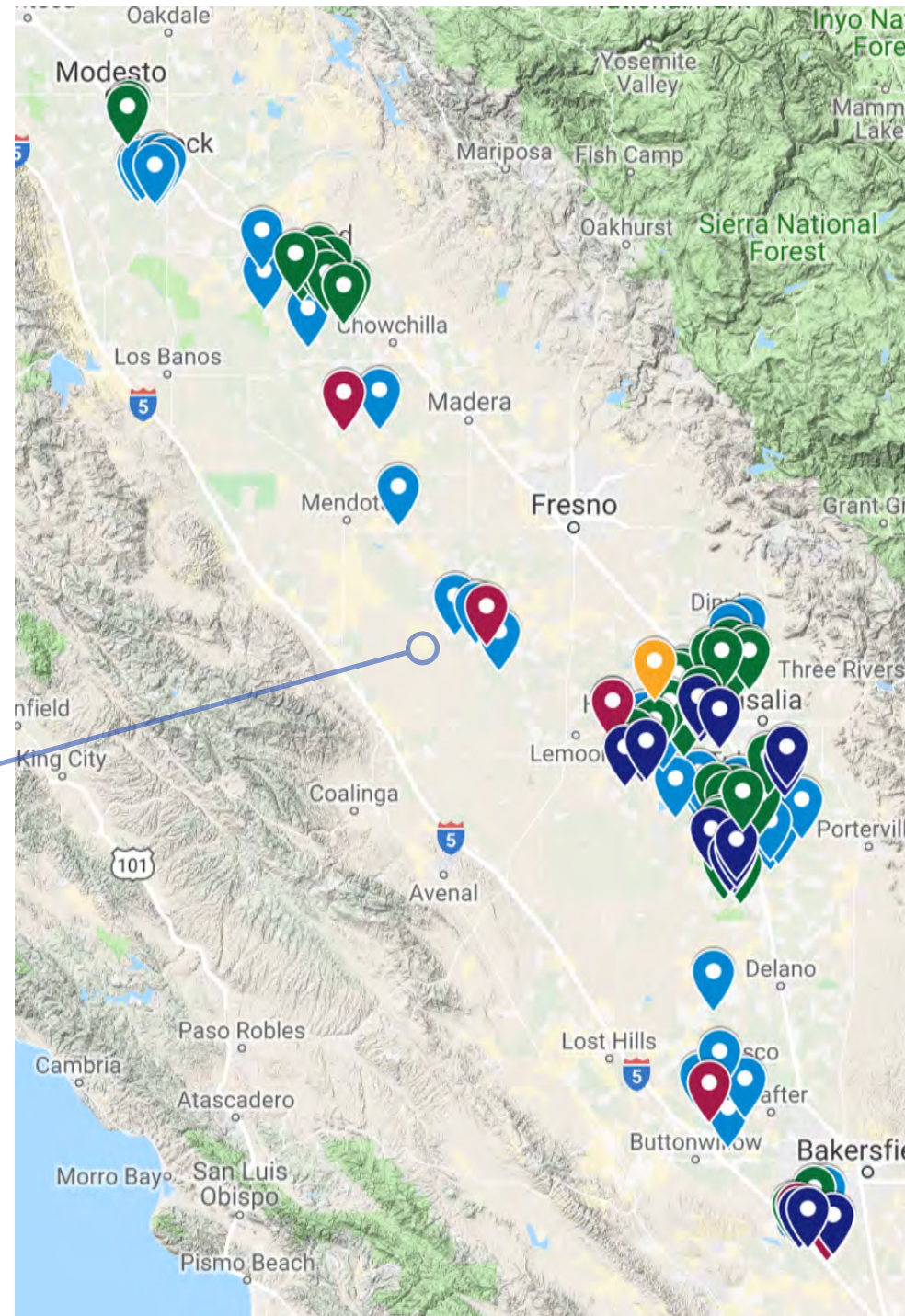
DDRDP PROJECT RECIPIENTS MUST:

- 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.

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

DDRDP FUNDED PROJECTS

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



- **2015 projects**
 6 electricity generating projects funded for \$11.1 million
- **2017 projects**
 16 biogas/transportation fuel digester projects funded for \$30.7 million
- **2018 projects**
 42 biogas/transportation fuel digester projects funded for \$72.4 million
- **2019 projects**
 43 biogas/transportation fuel and electricity generation digester projects funded for \$69.1 million +
 1 Demonstration project ●