



## 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 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 Natural Gas (RNG), which can be used as transportation fuel or directly injected into pipelines. Capturing methane, which is approximately 25 times more potent than carbon dioxide (CO<sub>2</sub>) 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, providing \$23.4 million in matching funds.

**2017:** CDFA awarded \$30.7 million to 16 projects that will create RNG, providing \$74.2 million in matching funds.

**2018:** CDFA awarded \$68 million to 40 projects that will create RNG, providing \$99.6 million in matching funds.

**2019:** CDFA awarded \$68.6 million to 42 projects that generate electricity and RNG, plus 1 demonstration project, which provided \$141 million in matching funds.

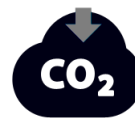
**2020:** CDFA awarded \$16.5 million to 12 projects that generate RNG. These projects provided \$30.3 million in matching funds.

**2022:** CDFA awarded \$18.7 million to 14 projects that generate RNG, which provided \$64.2 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 the production of by-products

### BY THE NUMBERS



# 23 million

**metric tons** of CO<sub>2</sub> equivalents (MTCO<sub>2</sub>e) will be reduced over **10 years**.

Annually, 2.3 million MTCO<sub>2</sub>e will be reduced, which is equivalent to taking



# 495,580

cars off the road each year

### 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 in November 2022*

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](https://cdfa.ca.gov/oefi/DDRDP)

# DDRD P FUNDED PROJECTS

Total estimated GHG reductions  
~23 million metric tons CO<sub>2</sub>  
equivalent (over 10 years)

From 2015 to 2022:  
\$214 million awarded for 130  
incentive and 1 demonstrative  
projects

-  **2015 projects**  
6 electricity generating projects
-  **2017 projects**  
16 RNG fuel digester projects
-  **2018 projects**  
40 RNG fuel and electricity  
generating digester projects
-  **2019 projects**  
42 RNG fuel and electricity  
generating digester projects  
+  
 1 Demonstration Project
-  **2020 projects**  
12 RNG fuel digester projects
-  **2022 projects**  
14 RNG fuel digester projects

