Climate Smart Agriculture

Scaling up proven on-farm practices produces tangible benefits for farmers, consumers and the environment.

These innovations add up to a key role for agriculture in California's climate strategy to reduce greenhouse gas emissions 40 percent by 2030 and carbon neutrality by 2045 relative to 1990 levels. Accomplishing these goals improves our outlook on several fronts, including our drought readiness, water supply and quality, crop yields, and the long-term health of our rural communities.

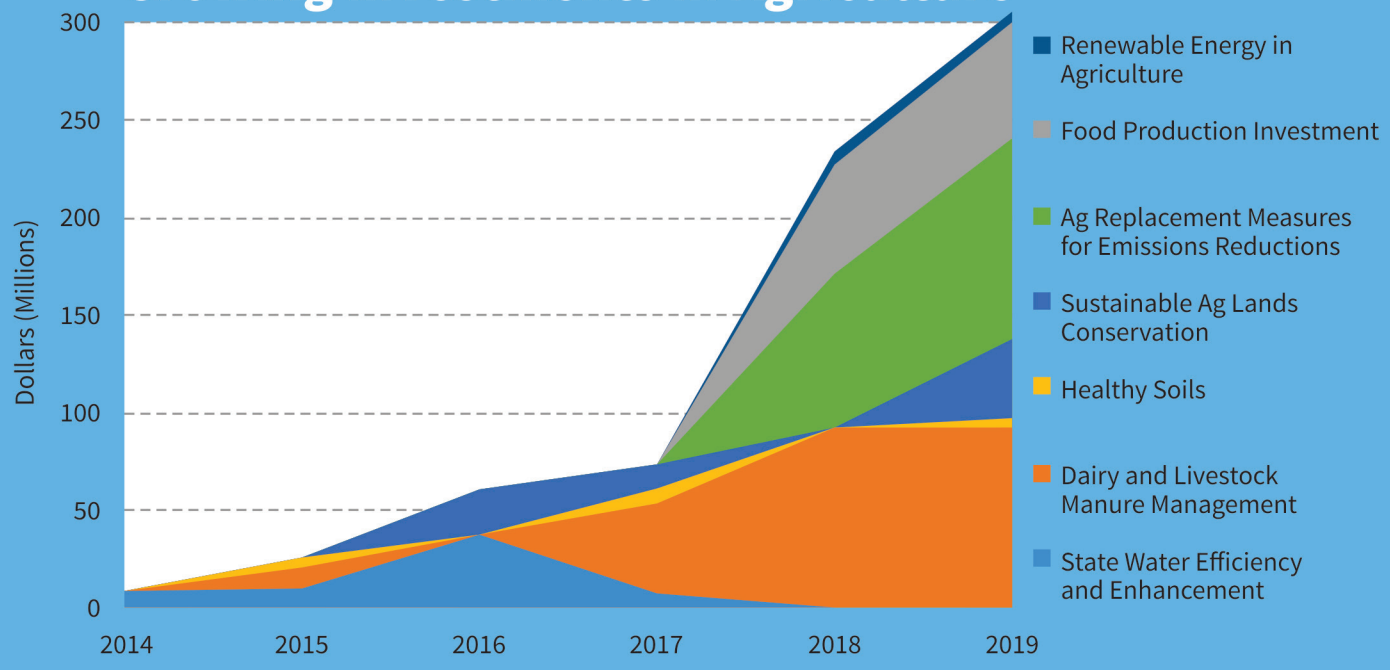
Why Climate Smart Agriculture?

- Keeps California agriculture sustainable
- Adapts to increased food demand
- Assists rural communities
- Saves energy and water
- Reduces greenhouse gas emissions

California Climate Investments
Cap and Trade Dollars at Work

California Greenhouse Gas Reduction Fund

Growing Investments in Agriculture



Dairy Digesters

CDFA's **Dairy Digester Research and Development Program** provides funding to convert manure from a tank or pond into renewable energy.

Who can apply? Existing milk producers, dairy digester developers, or a partnership between both entities.

64 projects funded

$114.3 million awarded, and $99 million allocated for DDRDP & AMMP combined for 2018-19

1.28 million $MTCO_2e$
total GHG reductions annually

https://www.cdfa.ca.gov/oefi/ddrdp/

Manure Management

CDFA's **Alternative Manure Management Program** provides funds to implement and demonstrate non-digester manure management practices that reduce greenhouse gases, such as installing solid separators.

Who can apply? Dairy and livestock operators.

57 projects funded

$30.4 million awarded, and $99 million allocated for DDRDP & AMMP combined for 2018-19

131,049 $MTCO_2e$
total GHG reductions annually

https://www.cdfa.ca.gov/oefi/AMMP/

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Healthy Soils

CDFA's **Healthy Soils Program** funds farming practices like cover cropping and reducing tillage to sequester carbon, improving soil health and reducing greenhouse gas emissions.

Who can apply? Farmers, ranchers, recognized tribes, and partnerships between these entities.

317 projects covering 33,451 acres

$17.95 million in California Climate Investments, with an additional $15 million allocated ($10 million from Prop. 68 and $5 million from CCI)

39,674 $MTCO_2e$ estimated reduction

https://www.cdfa.ca.gov/oefi/healthysoils/

Efficient Irrigation

CDFA's **State Water Efficiency and Enhancement Program** (SWEEP) funds irrigation projects that save water and reduce greenhouse gas emissions, like installing soil moisture monitoring systems, micro-irrigation systems, pump efficiency upgrades and renewable energy.

Who can apply? California agricultural operations.

614 projects covering 114,000 acres

$62.7 million in California Climate Investments, with another $20 million from Prop. 68 allocated in 2018-19

75,370 $MTCO_2e$ in annual GHG reductions

https://www.cdfa.ca.gov/oefi/sweep/

Food Production Investment Program

The California Energy Commission's FPIP provides grants, loans or any financial incentives to replace high energy-consuming equipment and systems in the food processing industry, helping accelerate the adoption of state-of-the-art energy technologies that can substantially reduce energy use and GHG. The program offers funding in two tiers: Tier 1 funds commercially available energy efficient equipment upgrades, and Tier 2 funds technologies that are emerging.

$60 million from California Climate Investments, with an additional $64 million for 2018-19

Who can apply? Food processing facilities that are defined by NAICS codes 311 or 3121.

More information for prospective applicants is available online at:
https://www.energy.ca.gov/contracts/other_research.html

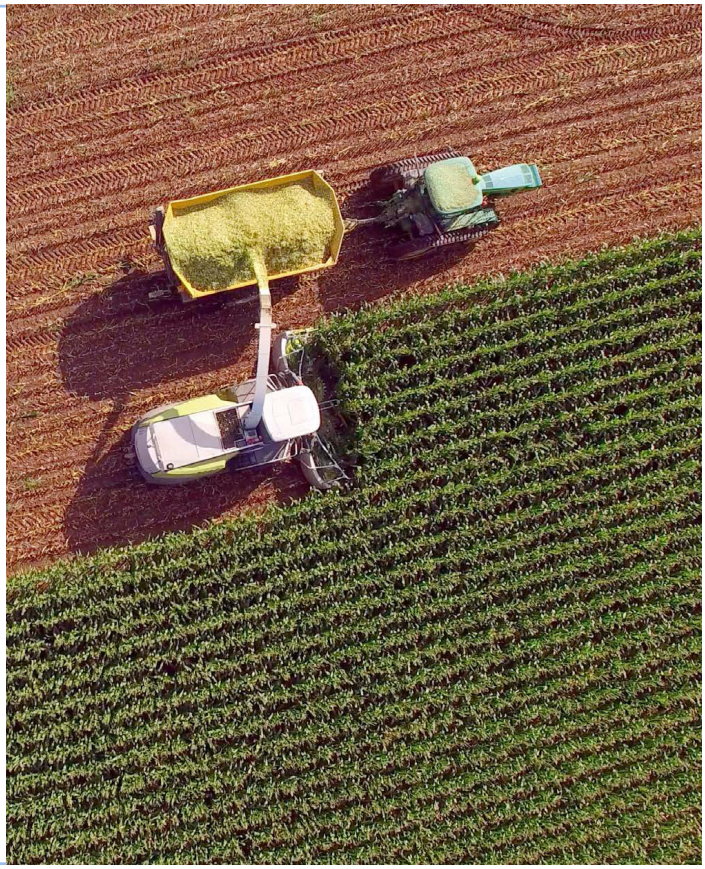
FARMER

The Funding Agricultural Replacement Measures for Emissions Reductions (FARMER) program provides funding to replace outdated agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations.

$135 million allocated for 2017-18, including $85 million from the Greenhouse Gas Reduction Fund

$132 million allocated for 2018-19, including $112 million from the Greenhouse Gas Reduction Fund

Who can apply? Farmers apply to their local air districts. Contact information for the districts, along with more about the FARMER Program, can be accessed on the FARMER Program website:
https://ww2.arb.ca.gov/our-work/programs/farmer-program



Technical Assistance for CDFA Programs

Technical and community-outreach assistance for applicants to CDFA's incentive programs has been made available through partnerships with agencies such as the United States Department of Agriculture (USDA) and the Strategic Growth Council (SGC).

$75,000 from USDA to support technical assistance for SWEEP

$125,000 from the SGC, using funding from the greenhouse gas reduction fund, in 2017 to support SWEEP, AMMP and the Healthy Soils Program.

$2.1 million awarded by CDFA to technical assistance providers in 2018 to support SWEEP, AMMP and Healthy Soils Program applicants.

Who can apply? Entities such as non-profit organizations, University Cooperative Extensions and Resource Conservation Districts receive funding through a competitive grant process. More information: https://www.cdfa.ca.gov/oefi/

Sustainable Ag Lands Conservation

SALC provides funds for agricultural conservation easements and local agricultural protection strategies to protect lands from conversion to urban and rural residential development.

$124.1 million from the Greenhouse Gas Reduction Fund

69 easements funded, protecting...

91,802 acres of irreplaceable ag land

37.7 million metric tons of CO_2 equivalent GHG savings over 30 years

For more information, see the SALC website: http://sgc.ca.gov/programs/salc/resources/

Updated June 2019

CDFA + UC ANR Partnership for Climate Smart Ag

CDFA and UC Agriculture and Natural Resources announced a new partnership in October 2018 to advance Climate Smart Agriculture in California. This partnership will provide $1.1 million to hire 10 UC Cooperative Extension community education specialists deployed statewide to partner with farmers and ranchers interested in implementing climate smart farming and ranching practices and to assist and encourage farmers to participate in CDFA climate smart agriculture programs.

For more information, visit: https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=28550

Ag Worker Vanpools

The Agricultural Vanpools Pilot Project administered by the California Air Resources Board expands access to reliable, efficient vanpools for agricultural workers. The board awarded a grant in October 2018 to the California Vanpool Authority (CalVans) to deploy 154 new vans in the San Joaquin Valley and other low-income ag areas. The vans are retrofitted with add-on hybrid technology to reduce fuel use by 25 percent.

Up to $6 million from the state's Low Carbon Transportation Investments

Renewable Energy in Agriculture Program

The REAP program is being administered by the California Energy Commission to provide funding to support on-farm renewable energy projects and energy efficiency projects.

$6 million for 2017-18

$4 million for 2018-19