

KORONIVIA JOINT WORK ON AGRICULTURE

KAREN ROSS, SECRETARY

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Bonn, Germany

June 18-19, 2019



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE



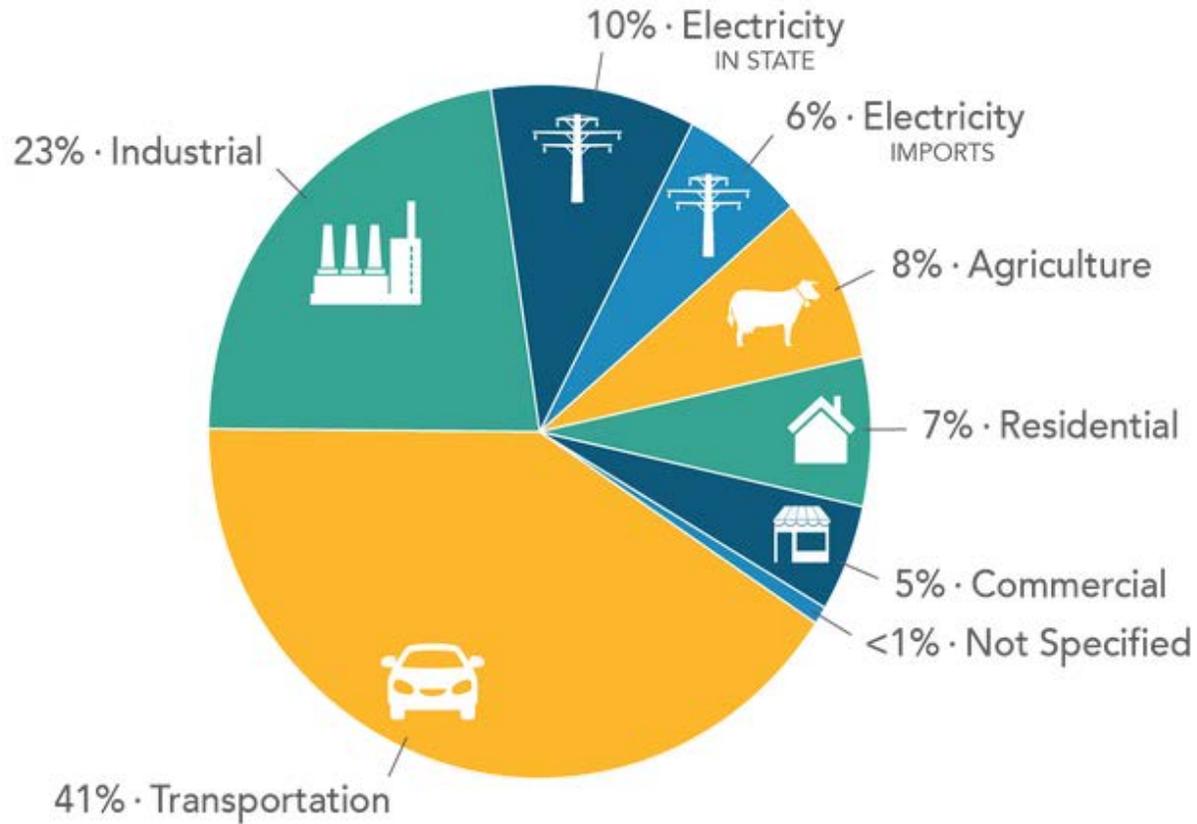
**CALIFORNIA
IS THE 5TH
LARGEST
ECONOMY
IN THE
WORLD**





- **Leading Producer of Specialty Crops in the Nation**
- **400+ Crops/Commodities**
- **Innovation/Technology**
- **~77,000 Farms**
- **Leading Agricultural Universities**

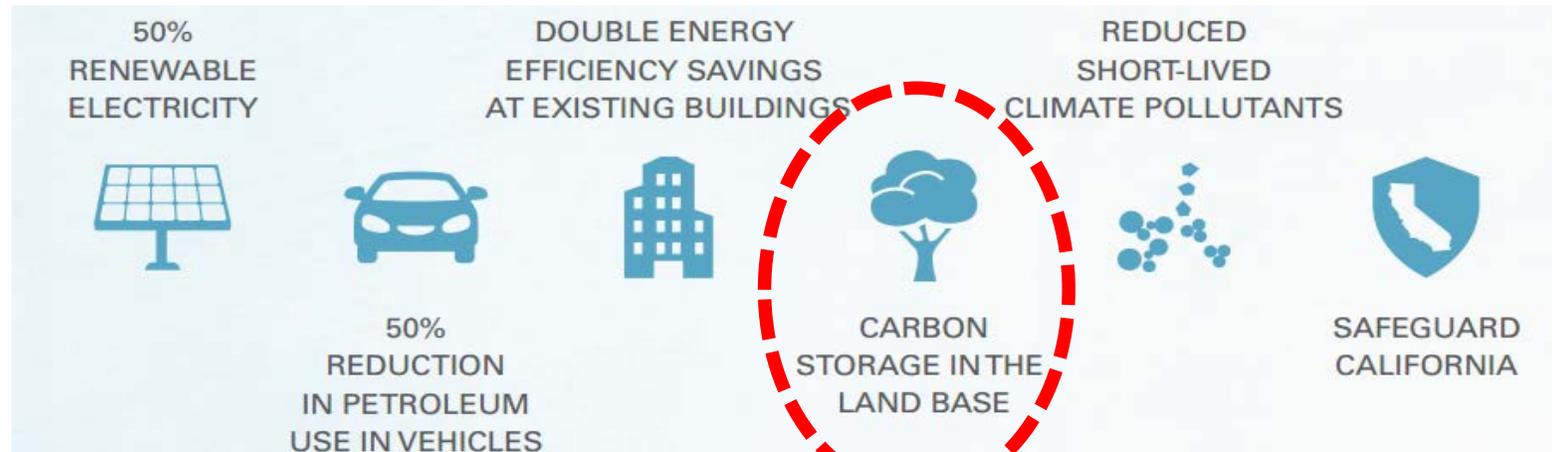




429.4 MMTCO₂e
2016 TOTAL CA EMISSIONS

GHG reduction goals set by Governor(s):

- **80% reduction below 1990 levels by 2050 (2006)**
- **40% reduction below 1990 levels by 2030 (2015)**



To maintain our natural and working lands as a carbon sink, California strives to **at least double the pace and scale** of State-funded land restoration and management activities through 2030 & beyond.

Cultivated lands & rangelands



5x

Acres in soil conservation practices

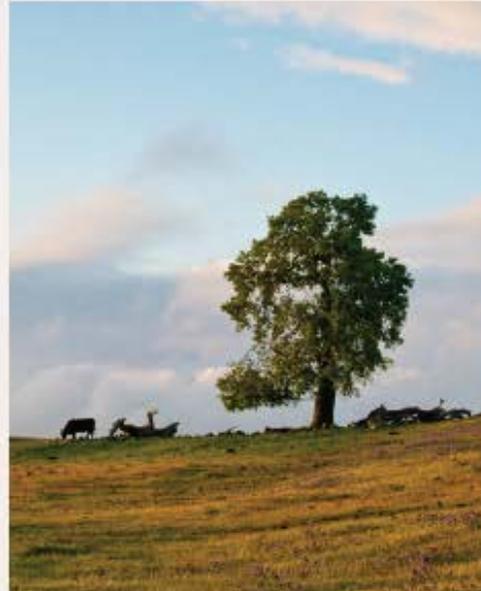
Forested lands



2x

Pace and scale of forests managed or restored

Savanna & woodlands



3x

Pace of reforestation of oak savannas and riparian areas

Wetlands & seagrass



2x

Rate of wetland and seagrass restoration

The California Healthy Soils Initiative is a collaboration of partners and state departments to promote the development of healthy soils on California's farmlands and ranchlands



Agronomist Valerie Bullard shows CDFA and industry representatives a radish produced with healthy-soils practices





THE OFFICE OF ENVIRONMENTAL FARMING & INNOVATION

 **healthy soils program**

The financial incentive program allows growers to try and learn about management practices that they may have not done before or implemented in parts of their agricultural operation

First in the nation to tie soil management practices with carbon sequestration in soils with the scientific assistance of USDA NRCS

Contributes to climate change adaptation, GHG mitigation and agricultural sustainability





317 projects to date
\$17.95 million in funding
33,451 acres
39,674 MTCO₂ eq/year reduction
Proposed \$28 million in future budget
Uses GGRF and bond funding
Quantified using COMET-Planner

CALIFORNIA CLIMATE SMART AGRICULTURE

Previous Webinars

California & Chile: Exploring On-Farm Climate Change Adaptation Strategies

California & The International Community: Looking to Soil as a Climate Smart Agricultural Strategy

- **Webinars**
- **Climate Smart Delegation Visits:**
 - **Netherlands**
 - **Israel**
 - **Australia**
 - **Chile**

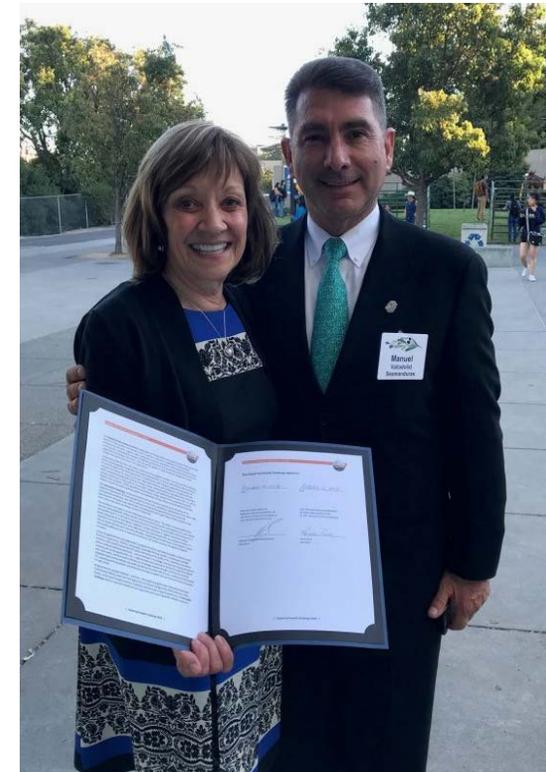
Netherlands



France



Mexico





THANK YOU FOR YOUR ATTENTION

Karen Ross

secretary.ross@cdfa.ca.gov



CDFA Climate Smart Agriculture Website:

<https://www.cdfa.ca.gov/climatesmartag/>

COMET-Planner Technical Report:

http://bfuels.nrel.colostate.edu/beta/COMET-Planner_Report_Final.pdf

UC ANR Climate Smart Agriculture:

<http://ciwr.ucanr.edu/Programs/ClimateSmartAg/>

HSP AGRICULTURAL MANAGEMENT PRACTICES

I. Cropland Management Practices

- 1) Cover Crop ([USDA NRCS CPS 340](#))
- 2) Conservation Crop Rotation ([USDA NRCS CPS 328](#))
- 3) Mulching ([USDA NRCS CPS 484](#))
- 4) Nutrient Management ([USDA NRCS CPS 590](#)) (15% reduction in fertilizer application *only*)
- 5) Residue and Tillage Management – No-Till ([USDA NRCS CPS 329](#))
- 6) Residue and Tillage Management – Reduced Till ([USDA NRCS CPS 345](#))
- 7) Strip Cropping ([USDA NRCS CPS 585](#))
- 8) Compost Application Practices (application rates consistent with those specified in [CDFA Compost Application White Paper](#))
 - Compost Application to Annual Crops
 - Compost Purchased from a Certified Composting Facility
 - On-farm Produced Compost (*compliant with all requirements in the RGA*)
 - Compost Application to Perennials, Orchards and Vineyards
 - Compost Purchased from a Certified Composting Facility
 - On-farm Produced Compost (*compliant with all requirements in the RGA*)

III. Woody Cover Establishment

- 1) Alley Cropping ([USDA NRCS CPS 311](#))
- 2) Hedgerow Planting ([USDA NRCS CPS 422](#))
- 3) Multi-story Cropping ([USDA NRCS CPS 379](#))
- 4) Riparian Forest Buffer ([USDA NRCS CPS 391](#))
- 5) Tree/Shrub Establishment ([USDA NRCS CPS 612](#))
- 6) Windbreak/Shelterbelt Establishment ([USDA NRCS CPS 380](#))

II. Herbaceous Cover Establishment

- 1) Conservation Cover ([USDA NRCS CPS 327](#))
- 2) Contour Buffer Strips ([USDA NRCS CPS 332](#))
- 3) Field Border ([USDA NRCS CPS 386](#))
- 4) Filter Strip ([USDA NRCS CPS 393](#))
- 5) Forage and Biomass Planting ([USDA NRCS 512](#))
- 6) Grassed Waterway ([USDA NRCS CPS 412](#))
- 7) Herbaceous Wind Barrier ([USDA NRCS CPS 603](#))
- 8) Riparian Herbaceous Cover ([USDA NRCS CPS 390](#))
- 9) Vegetative Barriers (601) ([USDA NRCS CPS 601](#))

IV. Grazing Lands Practices

- 1) Compost Application to Grassland (application rates consistent with those specified in [CDFA Compost Application White Paper](#))
 - Compost Purchased from a Certified Composting Facility
 - On-farm Produced Compost (*compliant with all requirements in the RGA*)
- 2) Prescribed Grazing ([USDA NRCS CPS 528](#))
- 3) Range Planting ([USDA NRCS CPS 550](#))
- 4) Silvopasture ([USDA NRCS CPS 381](#))