CLIMATE SMART AGRICULTURE

January 5, 2016

State Board of Food and Agriculture

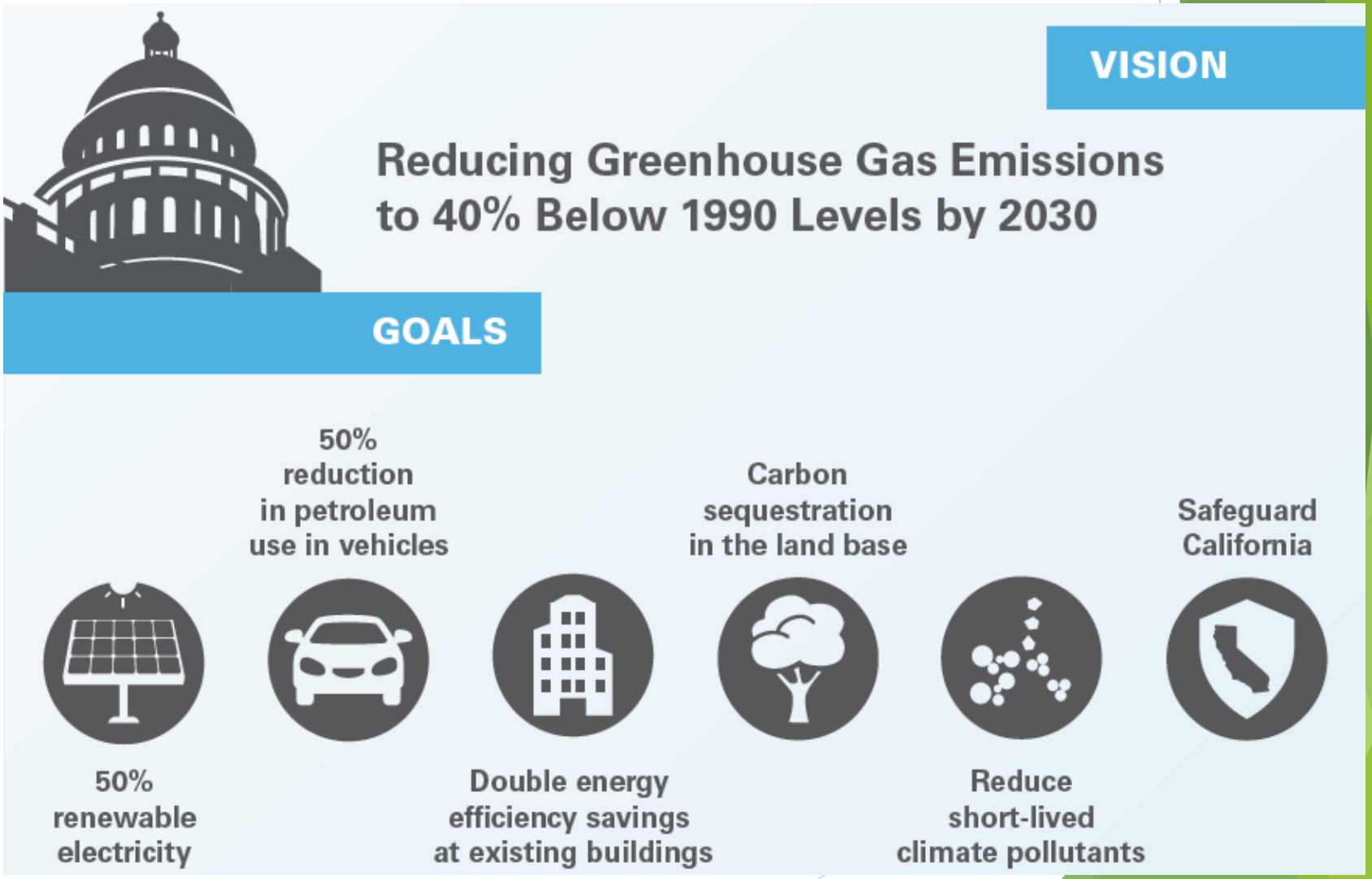
Jenny Lester Moffitt

Deputy Secretary

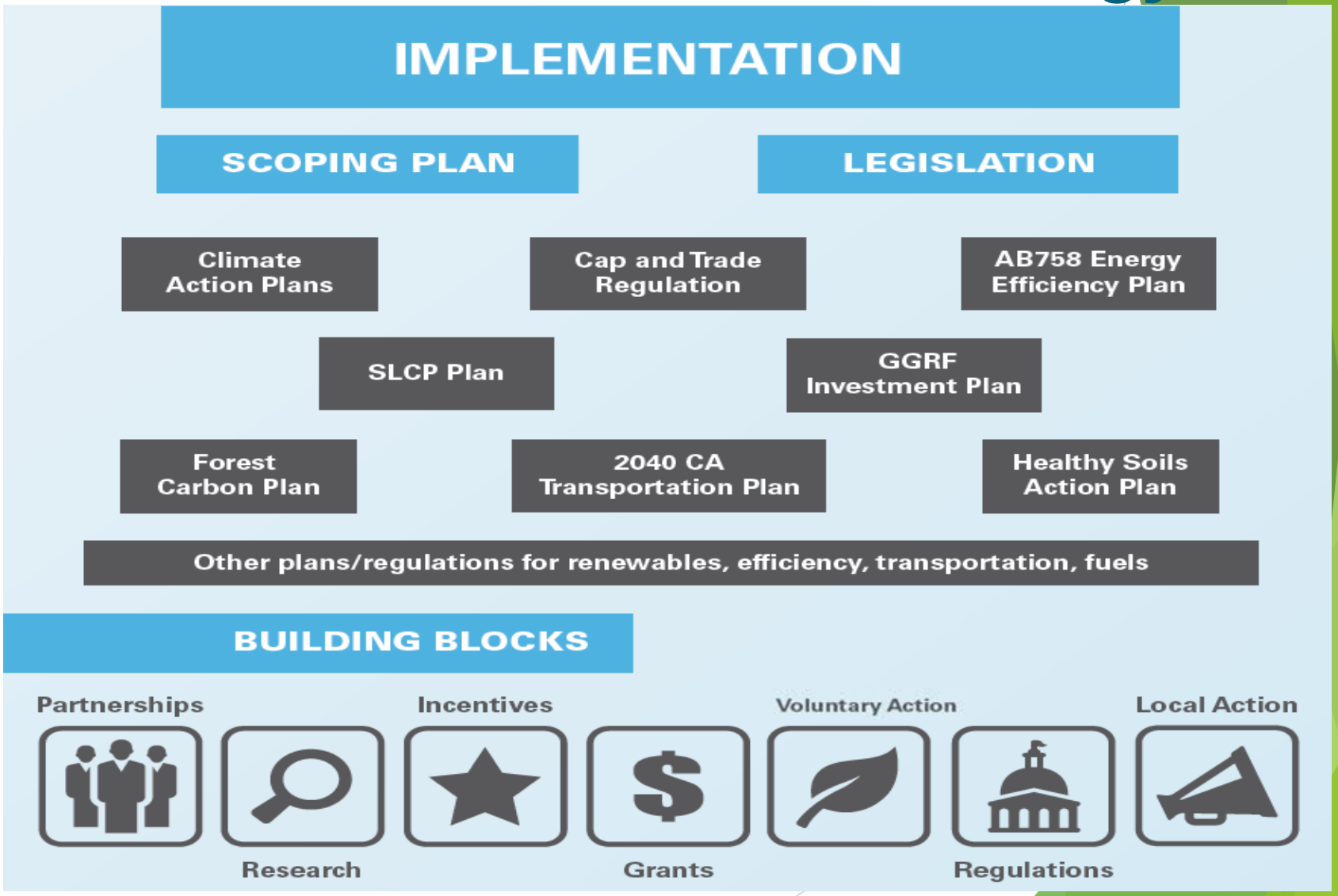
cdfa

CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

California's Climate Strategy



California's Climate Strategy



Climate Smart Agriculture

Climate smart agriculture is an approach to developing the technical, policy and investment conditions to achieve sustainable agricultural development for food security under climate change.

The concept is defined by three main pillars:

- Sustainably increasing farm productivity and incomes.
- Adapting and building resilience to climate change.
- Reducing/removing greenhouse gas emissions, where possible.

California's working lands offer substantial opportunities to reduce GHG emissions while building resilience to maintain our food and economic security.

California's Climate Smart Ag Practices

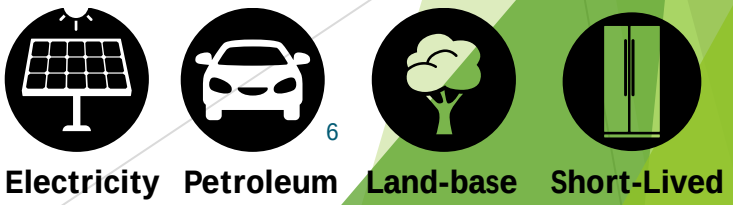
- **Soil Carbon Sequestration** - Healthy Soils
- **Manure Management** - Dairy Digester Research and Development
- **Water Management** - State Water Energy and Enhancement Program (SWEEP)
- **Pollinators and Biocontrol** – Perennial plantings to support pollinators
- **Fine-tuning Fertilizers**
- **On-farm Renewable Energy** – Solar, wind, biomass and digesters
- **Agricultural Land Conservation**

Milestones: Investments & Achievements

Healthy Soils Initiative: Governor Brown incorporated this initiative into his most recent budget directing agencies to expedite efforts contributing to soil health and appointing CDFA as lead agency for this effort.

State Water Efficiency and Enhancement Program (SWEEP): $20 million invested to improve irrigation practices that save water, reduce energy use and reduce greenhouse gas emissions. An additional $40 million has been allocated through the state's Greenhouse Gas Reduction Fund.

Dairy Digester Research and Development Program: $12 million invested to develop and install dairy digester technology to turn emissions into energy.



Healthy Soils Initiative

An Interagency Plan to Reduce Greenhouse Gases and Improve Drought Resiliency by Innovating Farm and Ranchland Practices.

- **Climate Benefit**: Sequester and Reduce Greenhouse Gases
- Co-benefits
  - Increase water retention
  - Improve plant health and yields
  - Reduce sediment erosion and dust
  - Improve water and air quality
  - Improve biological diversity and wildlife habitat

Land-base

Actions for the Healthy Soils Initiative

- **Protect and restore soil organic matter in California's soil**
  - Set goals for building soil organic matter
- **Identify sustainable and integrated financing opportunities**
  - To incentivize voluntary on-farm management practices
- **Provide for research, education and technical support**
- **Increase governmental efficiencies to enhance soil health on public and private lands**
- **Promote interagency coordination and collaboration**

Land-base

Questions?