

# Kick-off public webinar for California's Comprehensive Climate Action Plan under U.S. EPA's Climate Pollution Reduction Grants (CPRG) program

---

OCTOBER 8, 2024

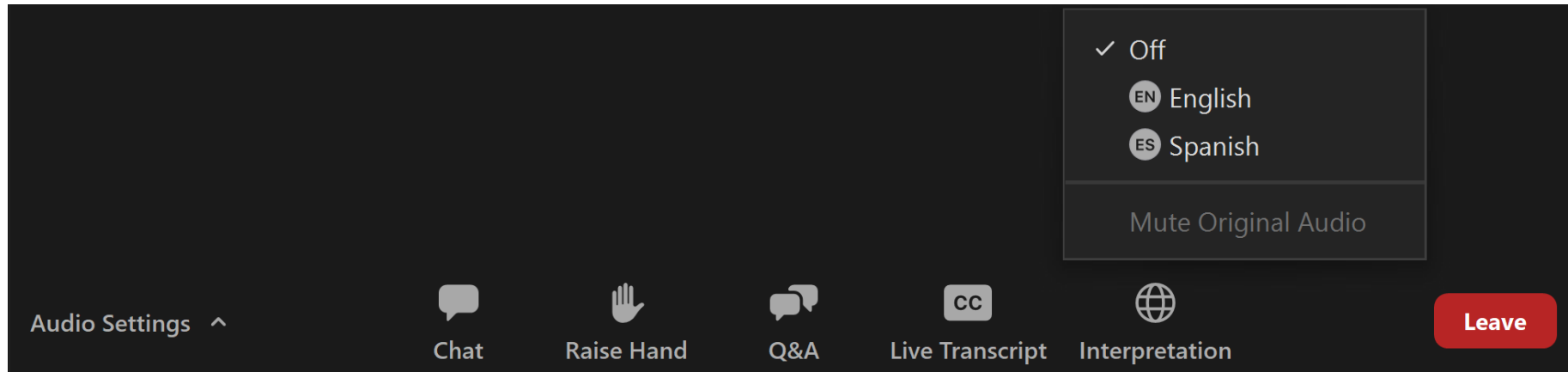


# Language Interpretation

## Cómo escuchar la interpretación de un idioma

---

1. In your meeting controls, click **Interpretation**, located at the bottom of the screen. / En los controles de la reunión, haga clic en (**Interpretation**). Esto se puede localizar en la parte de abajo.
2. Click the language that you would like to hear. For this meeting, you will have English and Spanish as your options. / Haz clic en el idioma que desee escuchar. Para esta reunión, hay las opciones de Inglés y Español.
3. To only hear the interpreted language (Spanish), click **Mute Original Audio**. / Para escuchar solo el idioma interpretado (español), haz clic en (**Mute Original Audio**).



# Webinar Logistics

---

- Webinar materials and recording will be made available at California's CPRG Meetings and Workshops webpage
  - <https://ww2.arb.ca.gov/us-epas-climate-pollution-reduction-grant-program-meetings-workshops>
  - For additional questions, please email: [ca.cprg@arb.ca.gov](mailto:ca.cprg@arb.ca.gov)
- Public comment after presentations
  1. Use the “Raise Hand” function in the toolbar at bottom of your screen
  2. When staff call your name, please “Unmute” and introduce yourself
  3. Commenters will be given 3 minutes. No ceding time to others.



# Agenda

---

- U.S. EPA's Climate Pollution Reduction Grants (CPRG) Program and California's CPRG efforts to date
- Update from the CPRG team at U.S. EPA Region 9
- Existing climate plans that will inform the State's Comprehensive Climate Action Plan (CCAP) under CPRG
- Public Comment

# Overview of U.S. EPA's CPRG Program

---

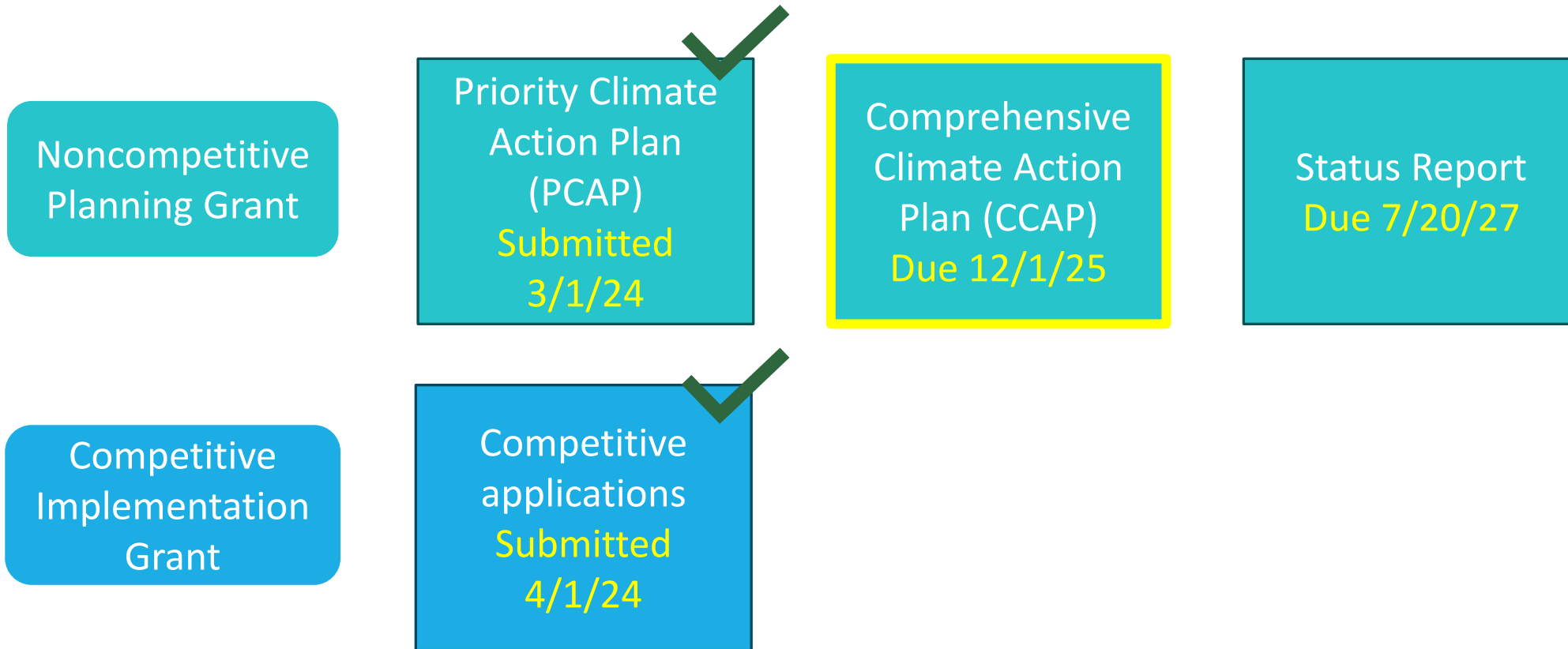
The Climate Pollution Reduction Grants (CPRG) program provides nearly \$5 billion in grants to states, local governments, tribes, and territories to develop and implement ambitious plans for reducing greenhouse gas emissions and other harmful air pollution. Authorized under Section 60114 of the Inflation Reduction Act, this two-phase program provides \$250 million for noncompetitive planning grants, and approximately \$4.6 billion for competitive implementation grants.



# CPRG requires 3 plans over 4 years

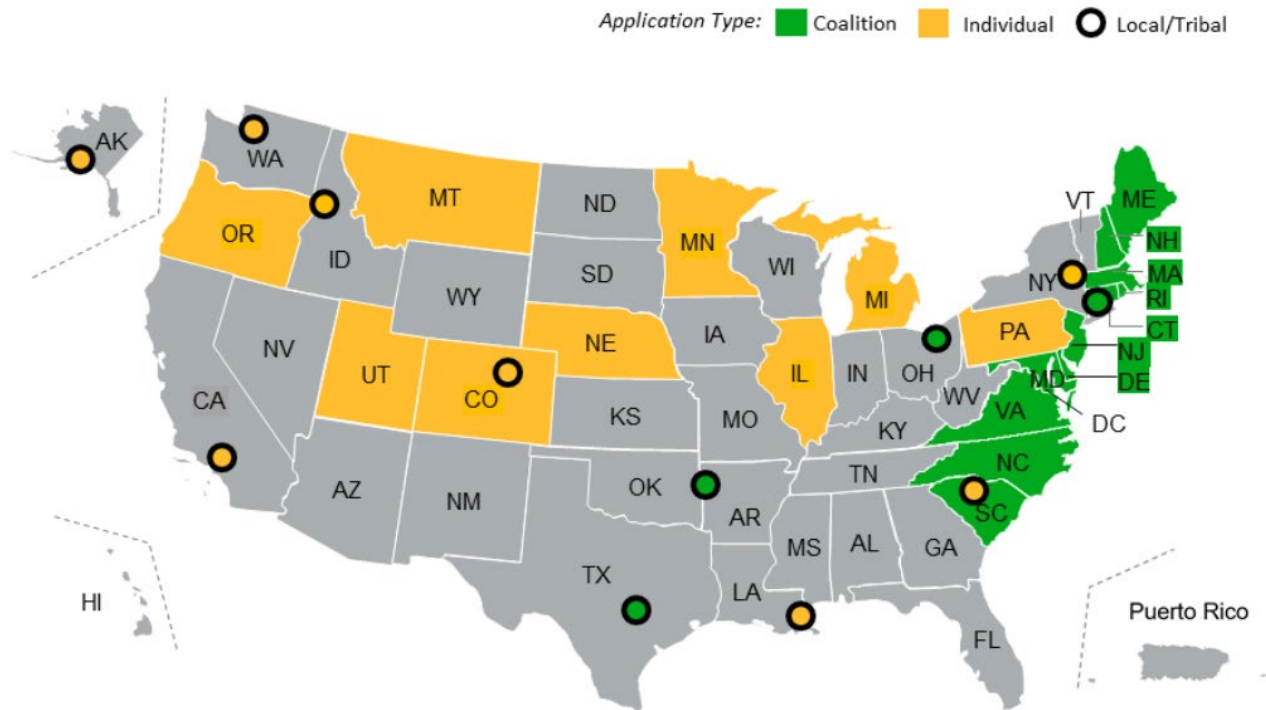
*PCAP is complete, awards have been made, CCAP is next*

---



# Many awards made during CPRG competitive phase, and many projects still seeking support

## Snapshot of awarded projects



## [NEW RESOURCE](#)

U.S. EPA's Climate Action Funding Resource Guide, including for CCAPs  
[Investing in America: Climate Action Funding Resource Guide | US EPA](#)

[CPRG Implementation Grants: General Competition Selections | US EPA](#)

# CCAP required elements (due Dec. 2025)

---

1. Coordination with State and local entities and Tribal Nations
2. Greenhouse gas (GHG) targets (near and long term)
3. GHG projections
4. GHG inventories
5. Climate measures
6. Quantified GHG reductions of measures
7. Benefits analysis, especially low-income and disadvantaged communities
8. Workforce analysis
9. Review of authority to implement measures
10. Coordination with other funding sources



# Outreach and Coordination Partners

---

- California State Agency CPRG Task Force
- Metropolitan statistical areas (MSAs) with CPRG grants
- Counties and cities
- Air districts
- Tribal Nations
- Low-income and disadvantaged communities
- Private sector
- Public

# California's State Agency CPRG Task Force

*An integrated government approach*

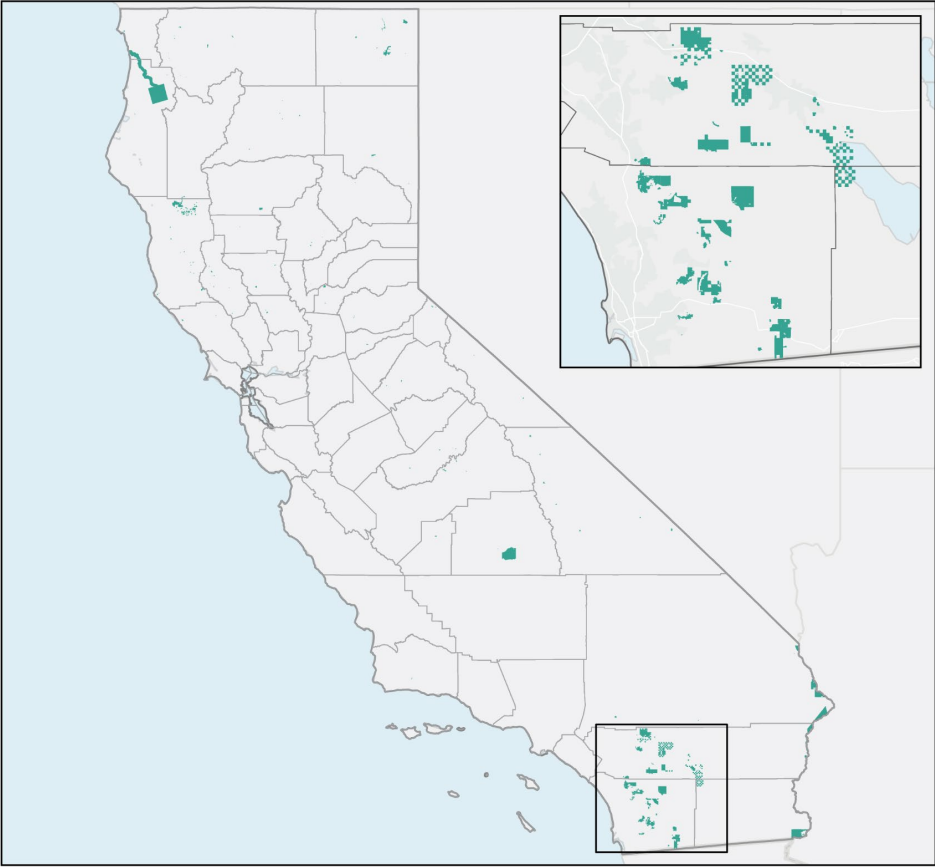
---



# Collaborations with MSAs & Tribes

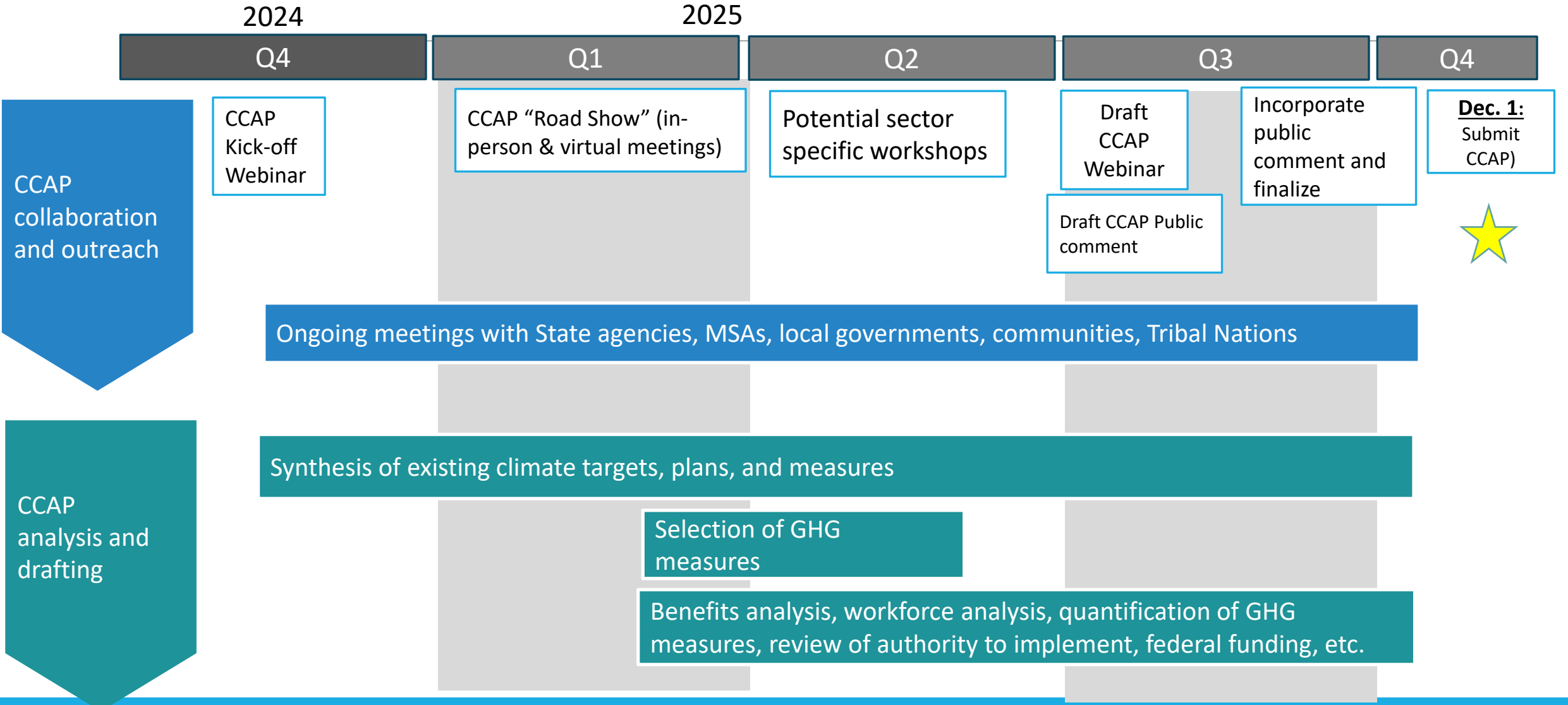


California State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS



California State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, USFWS, California State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

# Rough timeline for CCAP development



# Presentations from State Agencies

*Climate plans that will inform California's CPRG deliverables*

---

- California Air Resources Board
- California Energy Commission
- California Natural Resources Agency
- Department of Conservation

# California Air Resources Board

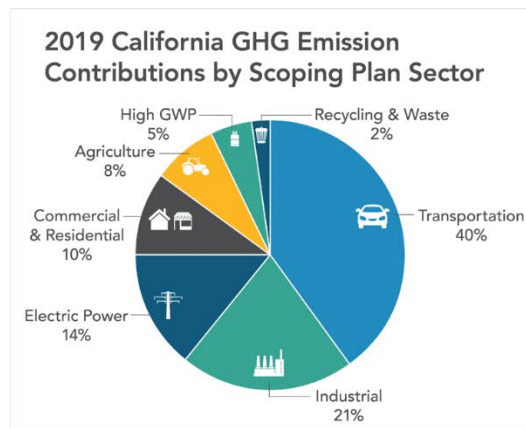
---

# California's Climate Policy Framework



## GHG Targets & Goals

**Legislation & Executive Orders:** Total GHGs (AB 32/SB 32) or sector targets (SB 1383/SB 100), etc.



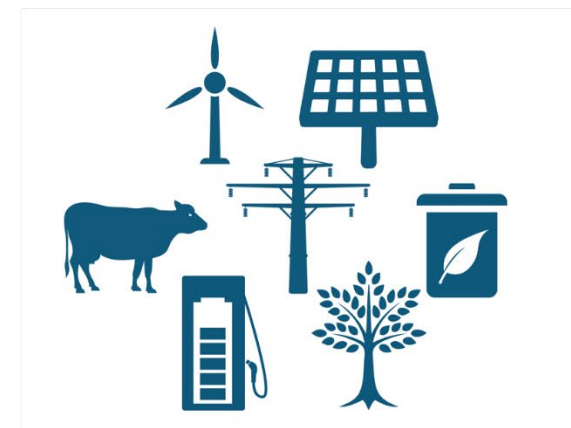
## Scoping Plan

Actionable plan across all sectors



## Action

**Regulations & Incentives:** Advanced Clean Cars, climate change investments, etc.

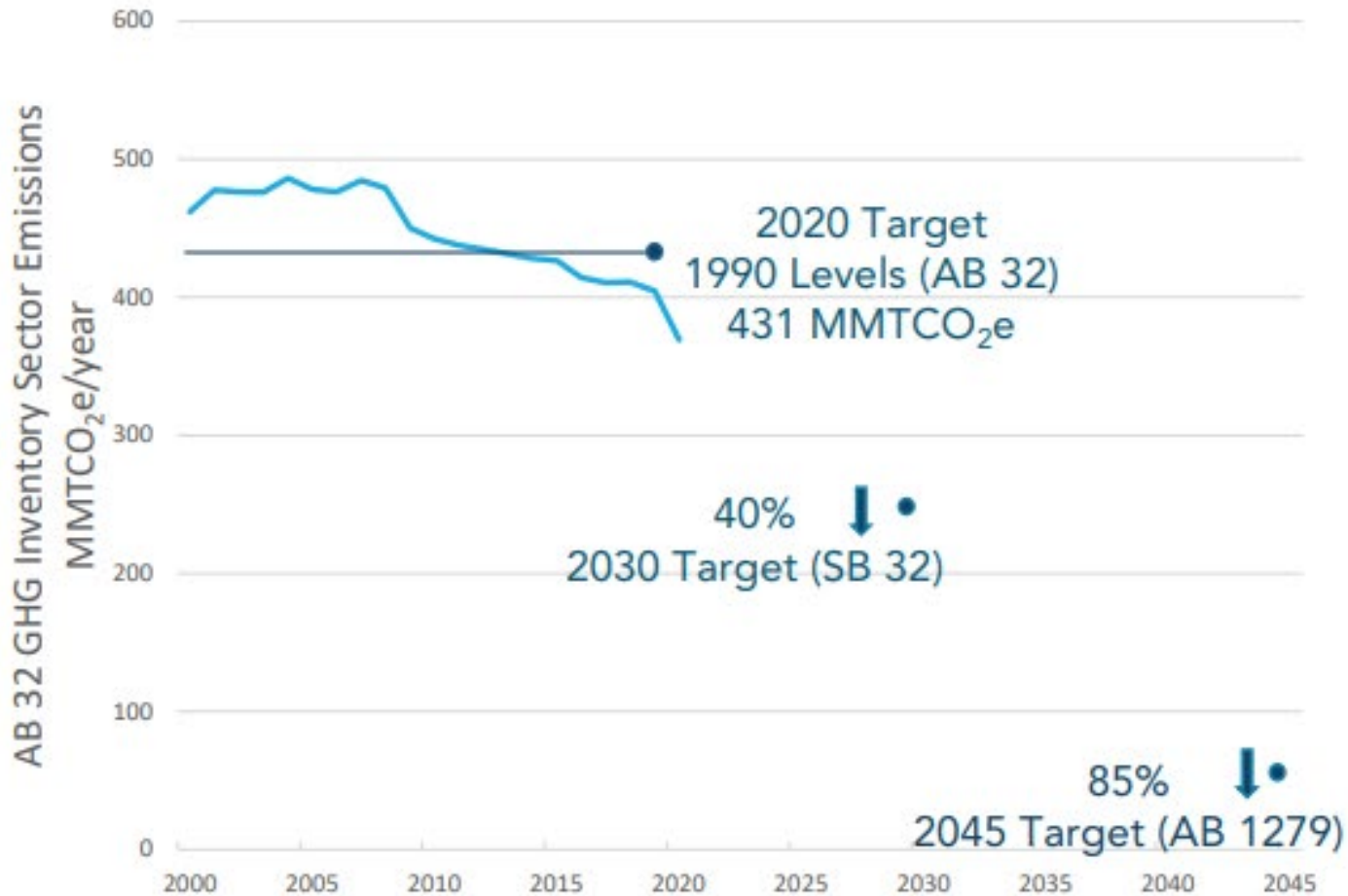


## Projects

**Examples:** Zero-emission trucks, energy infrastructure and renewables, compost facilities, digesters, etc.

# 2022 Scoping Plan Update

*CA's latest plan to achieve statewide climate targets*



ACHIEVING  
**CARBON**  
NEUTRALITY  
BY **2045**

GHGs included in statute: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF<sub>6</sub>), Nitrogen trifluoride (NF<sub>3</sub>).



# 2022 Scoping Plan Summary

---



Carbon neutrality by 2045, deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes and Executive Orders



Land management activities that prioritize restoration and enhancement of ecosystem functions to improve resilience to climate change impacts, including more stable carbon stocks

# 2022 Scoping Plan's Ambitious Actions Deliver Huge Benefits

---

## ***Unprecedented Deployment of Clean Technology and Nature-Based Climate Solutions***



37x total on-road ZEVs



6x electric appliances in residences



1700x hydrogen supply



4x installed wind/solar generation capacity



> 2.5 Million acres of NWL climate action per year

## ***Significant GHG Reductions***



94% decrease in liquid petroleum fuel demand



91% decrease in fossil gas used in buildings



66% decrease in methane emissions from agriculture



10% reduction in wildfire emissions

In 2045 relative to 2022

# 2022 Scoping Plan Shows Air Quality and Health Benefits from Fossil Fuel and Forest Fire Reduction

---



\$200 Billion in health cost savings from decreased fuel combustion



\$3.1 Billion in Health Cost Savings from Drop in Wildfire Smoke Pollution



# Economic Metrics of the 2022 Scoping Plan

---



Social cost of carbon (avoided economic damages) of \$6.5 to 23.9 billion in 2045

\$22 Billion in direct costs in 2045 for AB 32 climate action



\$6.5 Billion per year in direct costs for NWL climate action

California economy and jobs grow through 2045



Scoping Plan Scenario has negligible impact on both jobs and economy

# Uplifting Equity

---

- Climate Vulnerability Metric and economic evaluation show low income and communities of color will face both disparate climate impacts and disparate costs of climate mitigation
- Over 5 dozen EJ Advisory Committee Recommendations included in the Plan
- Plan identifies initiation of multi-agency discussion to systematically evaluate and plan for a transition for the demand and supply reduction of petroleum fuels that is equitable
- Ensure accessibility to clean technology and transition to clean energy does not further exacerbate existing health and opportunity gaps



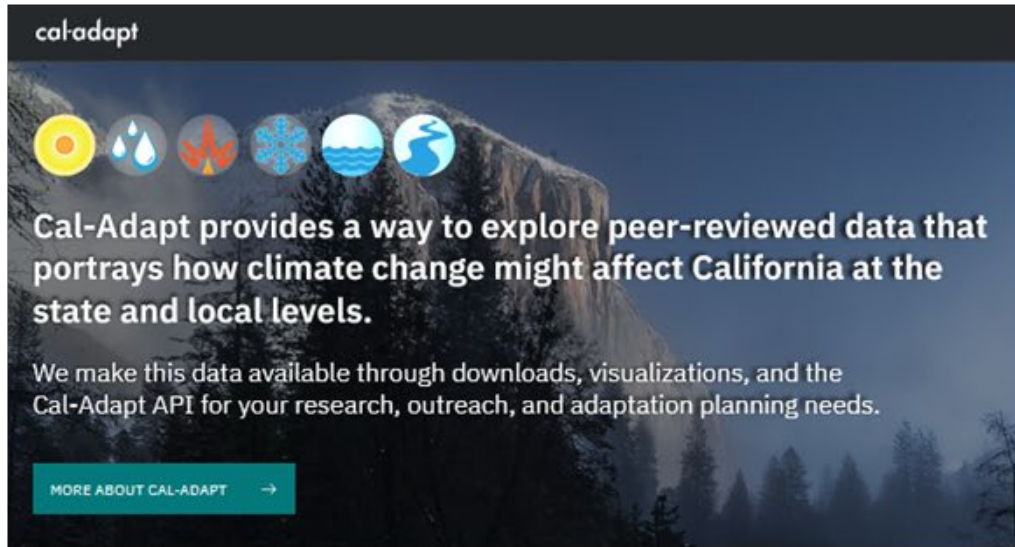
# Considering Climate in Energy Planning

Aleecia Gutierrez | Director, Energy Assessments Division

October 8, 2024



# Data Products Available through an Expanding Cal-Adapt Enterprise

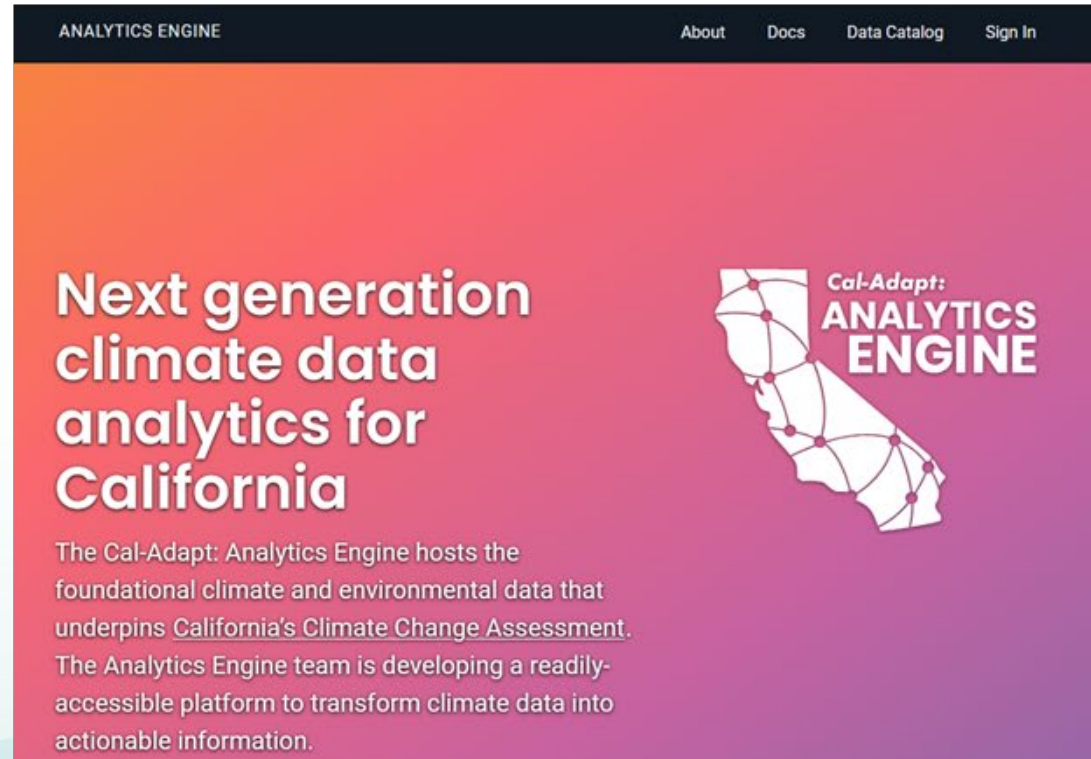


**Interactive web application**

- ~ 10 Tb data

**Analytics engine**

- ~ 2.5 Pb data



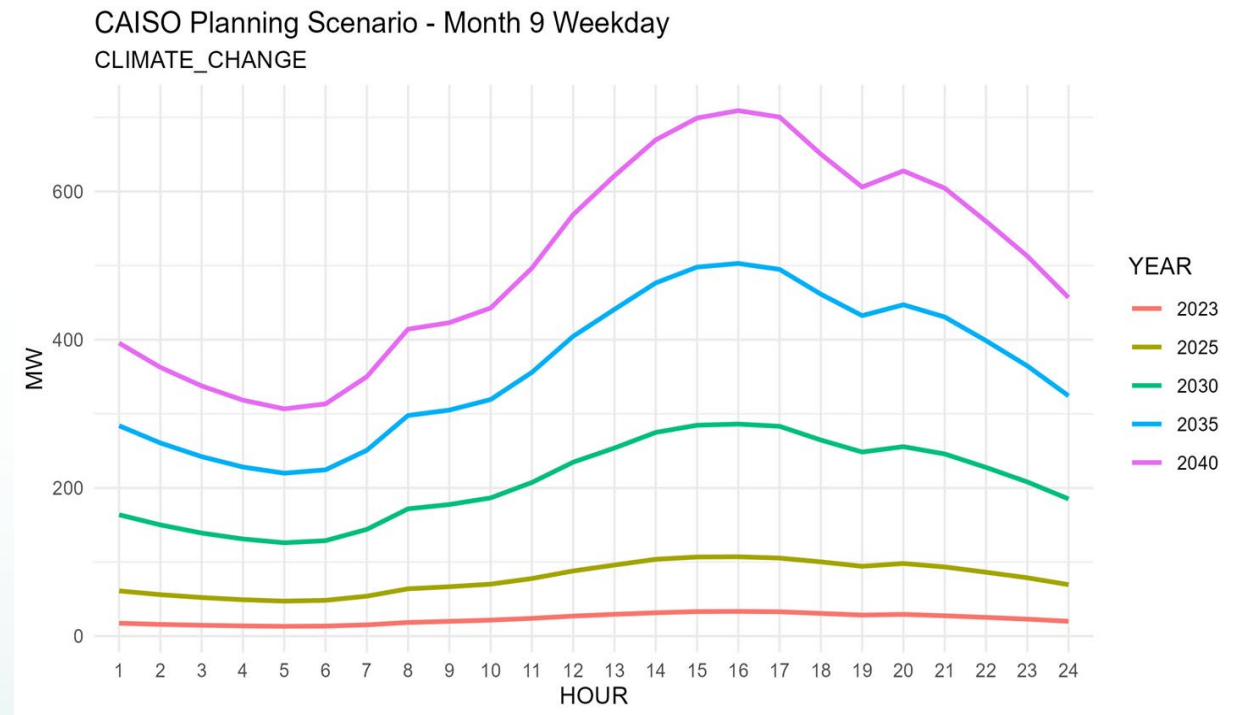
Sources: <https://cal-adapt.org/> , <https://analytics.cal-adapt.org/>



# Energy Demand Forecast – Climate Change Enhancements

- Shift to using downscaled and detrended climate projections rather than historical weather data for forecasting energy demand
- Develop a probabilistic hourly load dataset for use in reliability assessments

## Estimated Impacts of Climate Change on Energy Demand in September

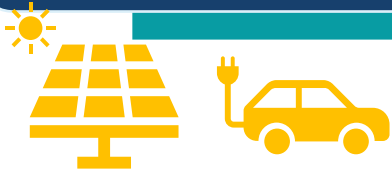






# SB 100 Report Considerations of Climate Change

Incorporates existing strategies to reduce emissions that contribute to climate change



## Existing Strategies

- RPS & Zero carbon resources
- Zero Emission Vehicles
- Building Decarbonization
- EE & Fuel Shifting

Accounts for anticipated impacts of climate change



## Plans through 2045

- Uses a demand forecast that accounts for larger variations in weather
- Accounts for variation in renewable resource availability due to weather
- Land use analysis incorporates the state's protected lands data

Performs analysis to better understand long-range risks



## Scenarios study uncertainty

- Innovations in central station generation technologies
- Variation in adoption of distributed energy resources
- Variation in location of resources
- Priorities of resource selection

Informs broader energy planning venues



## Results inform or coordinate with other agencies

- CAISO's 20-year transmission outlook
- IOU & POU procurement planning
- CNRA Natural & Working Land Climate Smart Strategy (Executive Order N-82-20)



# NATURE-BASED CLIMATE SOLUTIONS

CPRG CCAP – California's Nature-Based Solutions Agenda

October 8, 2024



## What Are Nature-Based Solutions?

River Partners' 2,100-acre Dos Rios Ranch Preserve before and after restoration.

Nature-based solutions that deliver on California's climate change goals are land management practices that increase the health and resilience of natural systems, which supports their ability to serve as a durable carbon sink.

# CALIFORNIA CLIMATE ADAPTATION STRATEGY

Photo credit: State Parks





**NATURE-BASED  
CLIMATE SOLUTIONS**

California's Climate Smart Lands Strategy

## NATURAL AND WORKING LANDS CLIMATE SMART STRATEGY



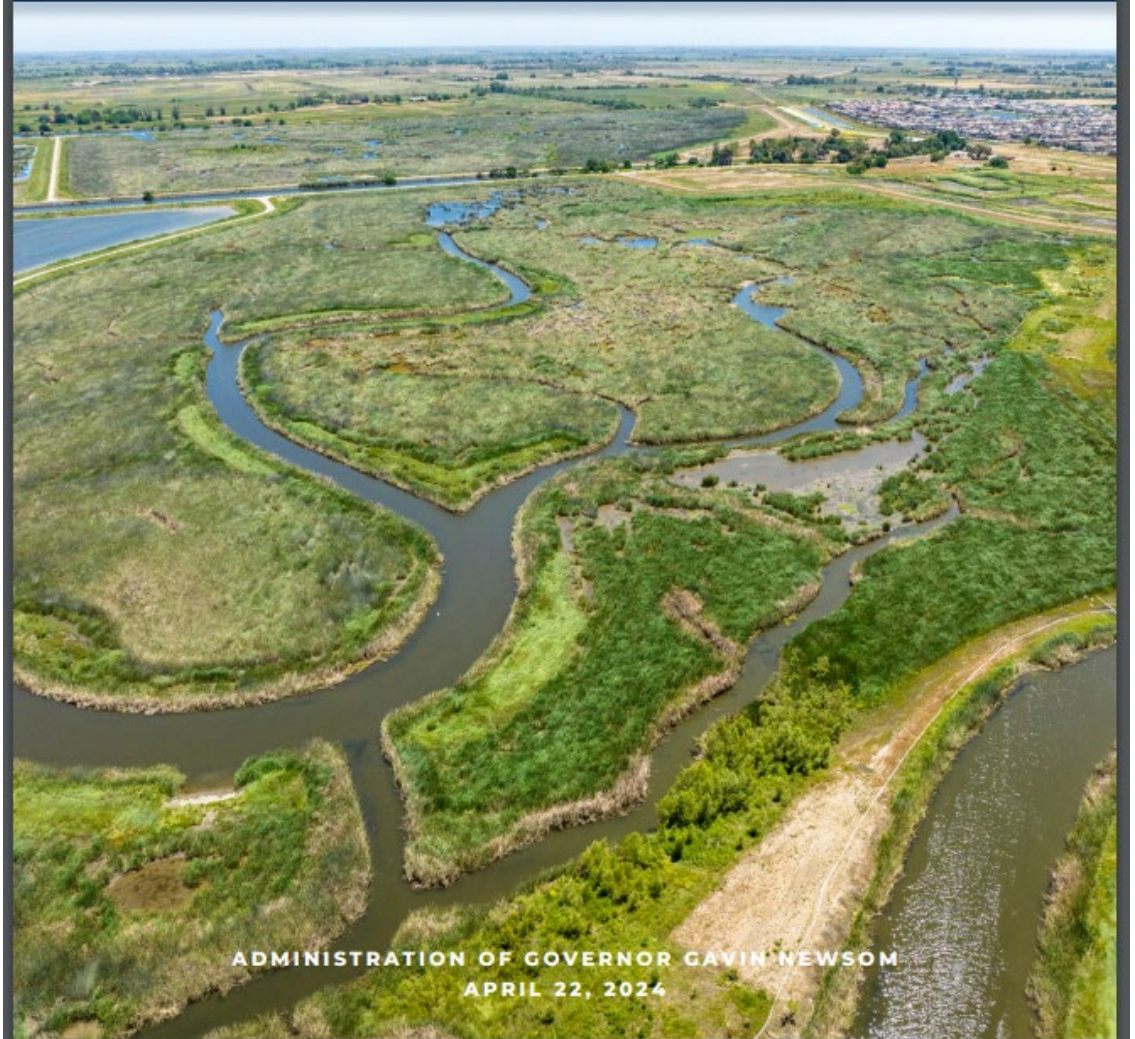
APRIL 22, 2022



**NATURE-BASED  
CLIMATE SOLUTIONS**

## CALIFORNIA'S NATURE-BASED SOLUTIONS CLIMATE TARGETS

AS REQUIRED BY ASSEMBLY BILL 1757 (2022, C. GARCIA)



ADMINISTRATION OF GOVERNOR CAVIN NEWSOM

APRIL 22, 2024

# California Department of Conservation

## MISSION

The Department of Conservation balances today's needs with tomorrow's challenges and fosters intelligent, sustainable, and efficient use of California's energy, land, and mineral resources.

## VISION

A safe, sustainable environment for all Californians.

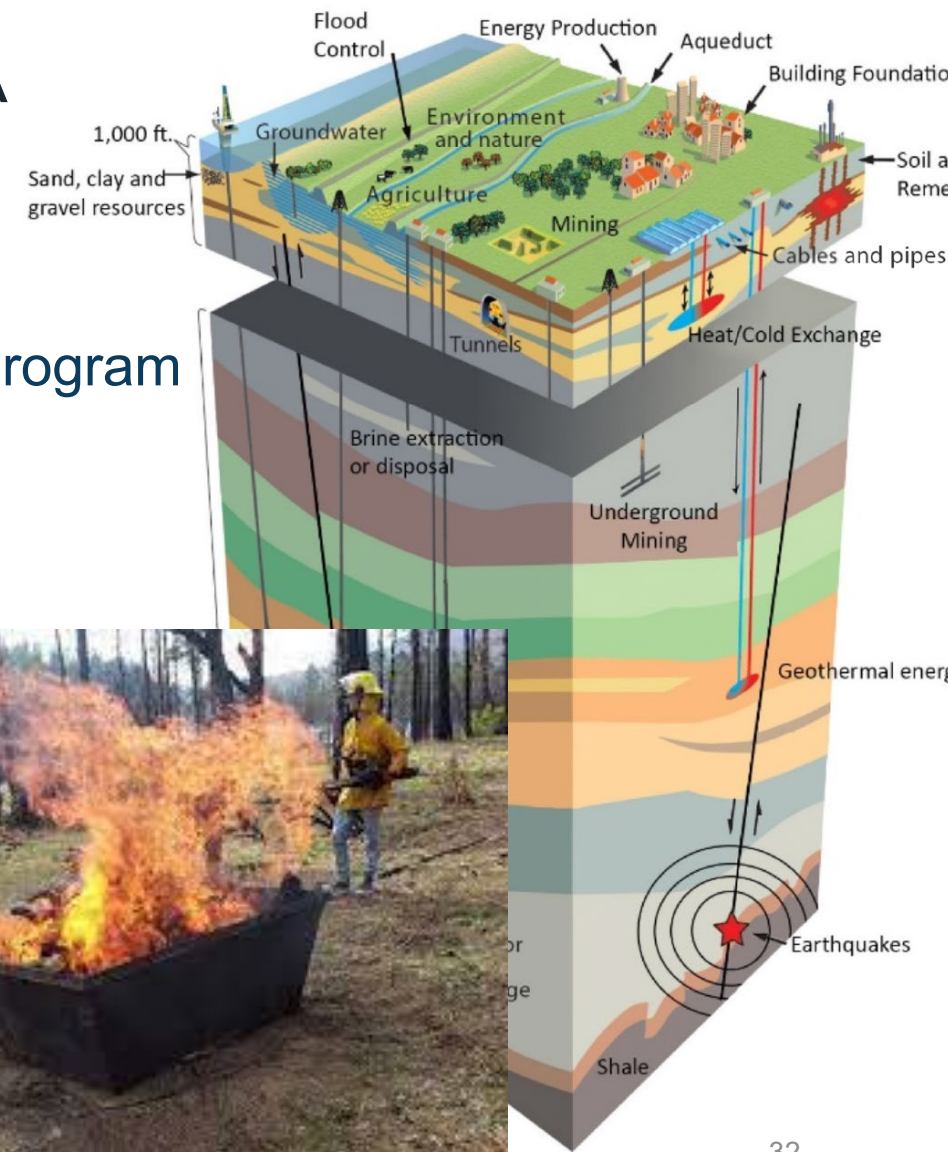


# We Accomplish this through Avoided Emissions...

- Regulate oil and gas well operation and decommissioning to ensure protection of public health, safety, and the environment
  - Enforce regulations to prevent and address leaks at existing oil and gas production facilities; ensure proper plug and abandonment of idle, orphaned wells
- Identify and map minerals critical to CA's energy transition
  - The energy transition is a materials transition; critical minerals are the backbone
  - Minerals are necessary for batteries, solar panels, electric motors
- Conserve agricultural land to support local food, habitat, and minimize sprawl
- Forest health planning, increasing prescribed fire, and biomass utilization
  - Mitigating wildfire risk, and thus potential future wildfire emissions
  - Building markets for biomass byproducts
  - Identifying opportunities for a circular bioeconomy in CA

## ... Sequestered Emissions...

- Implementing geologic carbon sequestration in CA
  - Planning for governance and regulation
  - Identifying risks and mapping opportunities
- Incentives for carbon-negative bioenergy
  - Forest Biomass to Carbon Negative Biofuels Pilot Program
- Building a biochar market



## ...And Mitigation

- Community adaptation to the fire and flood sequence
  - Developing models and maps to support debris flow hazard mitigation
- Forest health work to protect communities from wildfire





# Questions and Feedback Session

---

- Public Comment Instructions



Raise Hand

1. Use the “Raise Hand” function in the toolbar at bottom of your screen.
2. When staff call your name, please “Unmute” yourself and proceed to introduce yourself
3. Commenters will be given 3 minutes, no ceding time to others

# Additional resources

---

- Find meeting materials and recording of this webinar at California's CPRG webpage: <https://ww2.arb.ca.gov/us-epas-climate-pollution-reduction-grant-program-meetings-workshops>
- Email questions to [ca.cprg@arb.ca.gov](mailto:ca.cprg@arb.ca.gov)