California's Climate Strategy For Carbon Neutrality



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The Scoping Plan Scenario

The path to build our way out of over a 100 years of existing fossil energy and the built environment landscapes

AB 32 GHG Inventory Sectors 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

Natural and
Working Lands
(NWL)

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

Ambitious Action Delivers 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



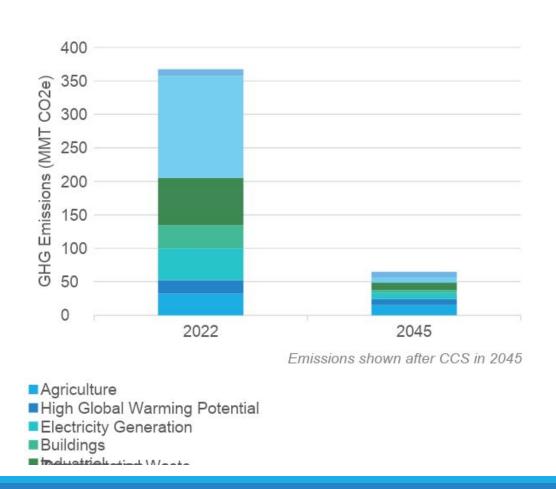
66% decrease in methane emissions from agriculture

10% reduction in wildfire emissions

In 2045 relative to 2022

Anthropogenic GHGs Target 2045: 85% Reduction below 1990

- Some emissions remain in the AB 32 Sectors
- Need carbon dioxide removal to compensate for residual emissions to achieve carbon neutrality
- Need both nature-based and engineered carbon dioxide removal



Lands and the Scoping Plan

Healthy trees, plants, and soils can support our greenhouse gas reduction goals in two primary ways:

- 1. Serving as carbon sinks through sequestration.
- 2. Avoiding releases of emissions from their substantial existing carbon stocks.







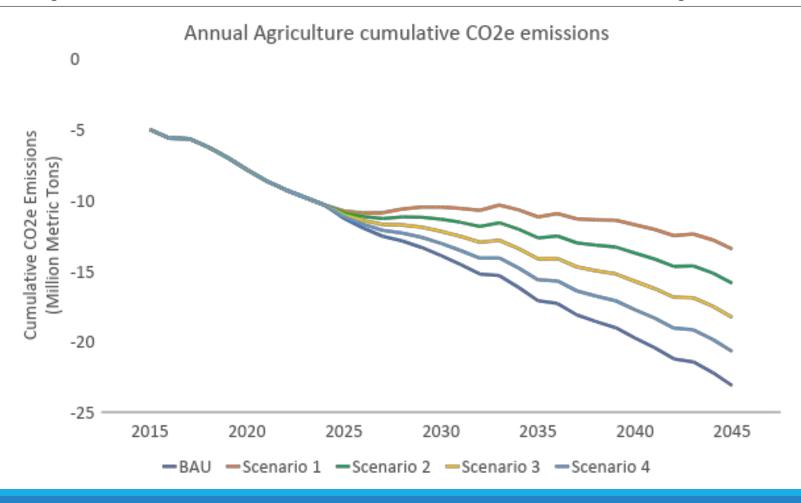




What will the carbon stocks and GHG emissions from natural and working lands be in the future?

How can our land management actions change this trajectory?

Example Results – Annual Croplands



Implementation Levels Identified in SP



10x increase in forest management



7.5x increase in climate smart agricultural practices; ~20% organic agriculture statewide by 2045



50% reduction in conversion of sparsely vegetated lands to another land use



10% decrease in annual wildfire emissions



200% increase in urban forest investment

NWL Scoping Plan Update

- 2045 NWL Carbon Stock Target
 - 4% below 2014 NWL total
- Contribution of NWL to carbon neutrality
 - Carbon stock loss equivalent to emissions of 7 MMT CO2e/year
 - This includes all gains and losses of carbon from all NWL
- Carbon Dioxide Removal from NWL
 - Increased carbon stocks equivalent to 1.5 MMT CO2/year
 - This includes carbon stock increases in urban forests

Next Steps for NWLs and Carbon Neutrality

- AB 1757 Implementation
 - Advisory Committee
 - Implementation target updates
 - Climate Smart Strategy updates
 - Methods/metrics development to track progress

Thank You



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CALIFORNIA'S CLIMATE PLAN LAYS THE ROADMAP TO 2045



CUT AIR POLLUTION 71%



SLASH GREENHOUSE GAS EMISSIONS 85%



DROP GAS CONSUMPTION 94%



CREATE 4 MILLION NEW JOBS



SAVE CALIFORNIANS \$200 BILLION IN HEALTH COSTS DUE TO POLLUTION

