



Climate-Safe California

Together, we can make California the first state in the nation to become carbon negative.

the
climate
center

RAISING THE ALARM

Evidence that tipping points are under way has mounted in the past decade. Domino effects have also been proposed.



A. Amazon rainforest
Frequent droughts

B. Arctic sea ice
Reduction in area

C. Atlantic circulation
In slowdown since 1950s

D. Boreal forest
Fires and pests changing

F. Coral reefs
Large-scale die-offs

G. Greenland ice sheet
Ice loss accelerating

H. Permafrost
Thawing

I. West Antarctic ice sheet
Ice loss accelerating

J. Wilkes Basin, East Antarctica
Ice loss accelerating

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The Challenge

The climate crisis is hitting harder and faster than scientists predicted even a few years ago. As the United Nations recently warned, we are witnessing a **“code red” moment** for humanity.



'Fossil fuels are choking humanity': Major UN report sounds the alarm on climate impacts

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Failing to Act Today Will Cost Us Down the Line

If we don't quickly and dramatically change course, these climate extremes will only get worse. The longer we delay action, the more costly these disasters become — in both dollars and human lives.



Bold Targets Work

- **AB 1493 (2002) tailpipe emissions cuts:** Later adopted by 13 other states, became the basis for 2010 national clean car standards
- **SB 100 (2018) 100% carbon-free electricity by 2045:** Already adopted by 10 other states and Biden Administration with earlier deadlines
- **Gov. Newsom Executive Order 100% ZEV car sales by 2035 (Sept 2020):** GM announced it will sell only 100% ZEV cars by 2035 (Jan 2021); Volvo by 2030 (Mar 2021)

California Has Fallen Behind

- ✓ **European Union:** Cut GHGs by at least 55% by 2030 ... from 1990 levels to reach net zero emissions by 2050
- ✓ **Denmark:** 70% GHG cut below 1990 by 2030;
- ✓ **Rhode Island:** 100% GHG free electricity by 2030
- ✓ **United Kingdom:** Cut GHGs 68% by 2030 from 1990 levels; 100% ZEV sales by 2030; 100% clean electricity by 2035



“I don’t at all feel that we [in California] are leading the world anymore.”

– Assembly Speaker Anthony Rendon



Climate-Safe California

Climate-Safe California is a unique and comprehensive campaign to make California the first state in the nation to become carbon negative.

Guiding Principles

Climate-Safe California — and all of The Climate Center's work — is guided by these core principles:

1. Follow the latest science
2. Secure a just transition for fossil fuel workers and their families
3. Prioritize climate justice with equitable access to climate solutions



Four Pillars of Climate-Safe California



**Phase out
fossil fuels**



**Scale up natural
carbon removal**



**Invest in resilient
communities for all**



**Fund climate
action now**

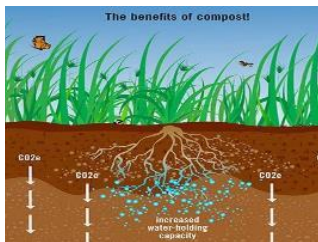
Nature-Based Carbon Removal Works



Carbon Capture, Utilization and Storage (CCS/CCUS): Removes CO_2 from power plants and industrial processes, placing the CO_2 into long-term storage, but 81% used for “enhanced oil recovery”



Direct Air Capture (DAC): Extracts CO_2 from the air by pulling air through filters where it reacts with chemicals and is stored or used to make synthetic fuels [~19 direct air capture (DAC) plants operating worldwide, capturing ~0.01 Mt CO_2 /year]



Nature-Based Sequestration (NbS): Absorbs CO_2 using nature, like trees, plants, soil, oceans, and other natural or biological settings.

Benefits of Nature-Based Carbon Removal

Key report findings and recommendations

- Proven techniques like **compost application, agroforestry and urban tree planting** draw down carbon and increase water security, reduce air pollution and extreme heat impacts, and enhance crop resilience to extreme weather.
- The cost of implementation at scale in California is roughly **\$30 billion over ten years** from public and private sources, relatively inexpensive for the benefits. In contrast, the economic impact of climate disasters in the state is far greater. For instance, the 2018 wildfire season inflicted \$150 billion in damages.
- Sequestration policies must be **designed to address the needs of vulnerable populations**, especially farmworkers, frontline, and urban communities. The full participation of these groups is key.



SETTING AN AMBITIOUS SEQUESTRATION GOAL FOR CALIFORNIA'S WORKING LANDS:

ANALYSIS AND RECOMMENDATIONS FOR
NET-NEGATIVE EMISSIONS BY 2030

JANUARY 2022