

California's Pioneering Clean Energy & Climate Policies

AB 32, SB 535 and SB 350 are advancing a strong economy and healthy environment

Overview

The state Legislature passed AB 32 (Nuñez/Pavley) in 2006, with bipartisan support, setting a statewide limit on carbon pollution and directing the California Air Resources Board to create a roadmap to roll back emissions to 1990 levels by 2020. In 2012, California enacted SB 535 (De León), which takes important steps to ensure that the communities that suffer the most from pollution and climate change are given the resources they need to address their impacts.

"AB 32 is helping cement CA's leadership position in the clean energy sector."

Eileen Tutt

California Electric
Transportation Coalition

In 2015, the state enacted SB 350 (De León), to reinforce California's leadership on climate and clean energy by directing the state to generate half of its electricity from renewable sources, double the efficiency of all buildings by 2030, and instructing utilities to move aggressively to create a widespread charging infrastructure for electric vehicles.

Together, these policies build a formidable framework for the state's clean energy and climate programs, serving as a proven and powerful engine of innovation in California. They already are delivering benefits:

- Reducing air pollution and improving public health
- Creating new jobs
- Using more clean, renewable energy
- Reducing our dependence on oil
- Stabilizing energy costs for consumers
- Attracting clean-tech investment

"California can steer the world in ways that blunt the worst impacts of climate change."

Prof. Hilda Blanco

University of
Southern California

Emissions are down, while California's GDP is up

The most recent data available shows that greenhouse gas emissions fell by 1.5 million metric tons in 2013 compared to 2012, while California's economy grew at 2%, which was greater than the national average. Emissions have fallen by 7% since peak levels in 2004, while GDP generally has been on the rise, demonstrating that emissions reductions and economic growth can go hand-in-hand.

Where Do California's Greenhouse Gases Come From?

37% Transportation ■ 20% Electric Power ■ 20% Industrial
9% Commercial & Residential ■ 8% Agriculture
4% High Global Warming Potential Gases ■ 2% Recycling & Waste

Source: CA Air Resources Board, California Greenhouse Gas Inventory, 2015 Edition

Making cap and trade work for all of California - a global movement

Praised as the best-designed program of its kind in the world, the cap and trade system under AB 32 requires California's major producers of carbon pollution to steadily reduce emissions by acquiring a shrinking number of tradable permits (called "allowances") for every ton of carbon they emit. Billions of dollars are being generated by the sale of these permits and, under SB 535, state policy directs a substantial share of the funds to those communities most impacted by climate change.

California joins 9 Northeastern states, the Canadian province of Québec, the European Union, and 7 regions in China—the world's largest producer of greenhouse gases—among the major economies enforcing cap and trade programs to reduce carbon pollution. Ontario and Manitoba are expected to join Québec in the near future in linking with the California program and Mexico also is working toward a similar cap and trade program.

AB 32 auction proceeds fund California Climate Investments

- Targets benefits to California's vulnerable and disadvantaged communities
- Helps fund the development of livable communities that serve California's changing demographics
- Promotes and protects environmental and public health
- Advances the state's clean energy economy and creates jobs
- Reduces the impacts of climate change
- Funds clean transportation alternatives, including transit and clean fuel vehicles

Climate Investments for CA

- Approx. \$4 billion in auction proceeds since 2012
- FY 2015-16 = \$2.4 billion projected
- FY 2014-15 = \$862 million
- Min. 25% to disadvantaged communities

Since 2014, more than 2,500 projects have been completed or are underway statewide, with nearly 150,000 clean vehicle rebates or vouchers redeemed.

The lifetime greenhouse gas emissions reductions expected as a result of investments made through 2015 is 14.3 million metric tons of carbon dioxide equivalent. (High Speed Rail not included.)

SB 535 helps communities most impacted by climate change and pollution

"The same communities who so often bear the brunt of climate change are also historically on the losing end of policy decisions, but California is shattering this flawed model by fighting poverty and pollution at the same time."

Sekita Grant
The Greenlining Institute

Disadvantaged communities are hit first and worst by climate change and air pollution. California's visionary SB 535 makes sure that these chronically underserved communities are prioritized when proceeds from the auctions are invested. The law requires that at least 25 percent of the funds go to projects that benefit disadvantaged communities, with at least 10 percent going to projects located directly within these communities. The California Environmental Protection Agency developed a tool called CalEnviroScreen 2.0 to identify communities most impacted by poverty and pollution. You can learn more about this tool by visiting <http://oehha.ca.gov/ej/ces2.html>.

California's Toolbox for Reducing Emissions

California has a full set of climate and clean energy strategies to transition California to a clean energy economy. In 2015, California enacted SB 350, the 2015 Clean Energy and Pollution Reduction Act, which requires at least 50% of California's electricity to come from renewable sources, such as solar, wind and geothermal by 2030 and mandates a 50% increase in energy efficiency in buildings by 2030. Other climate policies in California that build on AB 32 include:

- *Establishing a greenhouse gas reduction target of 40% below 1990 levels by 2030 required by Governor Brown's 2015 Executive Order*
- *Reducing greenhouse gas emissions from new and used cars and trucks by improving vehicle technologies through better performance standards*
- *Requiring oil companies and other fuel providers to deliver an increasing share of low carbon transportation fuels*
- *Setting stricter emissions limits on power plants that deliver electricity to California*
- *Encouraging local governments to change land use and transportation planning to build more walkable, mixed-use communities and reduce dependence on driving*
- *Setting aggressive recycling goals for commercial buildings and apartment complexes*
- *Tackling methane, black carbon and other potent, short-lived climate pollutants called super pollutants*

"AB 32 is cutting pollution and cleaning up the air we breathe."

Dr. David Tom Cooke
American Lung Association
in California

The AB 32 Scoping Plan will be updated this year

Focus Areas of the 2030 Target Scoping Plan

- Energy ■ Green Buildings
- Transportation & Land Use
- Water ■ Agriculture
- Natural & Working Lands
- Waste Management
- Super Pollutants

Updated every five years, the AB 32 Scoping Plan outlines the state's strategies to achieve its greenhouse gas emissions reduction goals. Thanks to these strategies, California is on track to meet the 2020 goal of reducing emissions to 1990 levels by 2020. The newest Scoping Plan Update will build upon the programs established to reach the 2020 goal and carry these programs through to 2030 and beyond to achieve a 40% reduction in greenhouse gases below 1990 levels by 2030.

California's Approach to Transportation Pollution

Transportation is the largest source of carbon pollution in California. It accounts for about 40% of all greenhouse gas emissions. To cut transportation pollution, California is taking a three-pronged approach:

1. Clean Vehicles

California is bringing the most advanced clean vehicles to consumers, and its Advanced Clean Cars standards have been adopted at the federal level, improving fuel efficiency and saving American consumers money at the pump. Air quality in California continues to improve because of the program's strict smog standards. Policies that incentivize clean fuel infrastructure and clean vehicle purchases are structured to help those in disadvantaged communities move to cleaner vehicle choices.

2. Clean Fuels

The Low Carbon Fuel Standard (LCFS) sets pollution limits for transportation fuels in California, and is delivering cleaner fuels, insulation from gas price spikes, cuts in greenhouse gas emissions, and healthier air while our economy continues to grow. Together, the increased use of clean alternative fuels, the LCFS and the inclusion of fuels in the AB 32 cap and trade program will result in \$3.0-\$4.8 billion annually in avoided damage costs* by 2030 (*attributable to reduced criteria air pollutant emissions and GHGs as well as a decrease in petroleum consumption).

3. Smart Cities

Under the Sustainable Communities Act (SB 375), local governments across California are required to make new blueprints for growth planning over the next two decades to reduce carbon pollution. These blueprints—called Sustainable Communities Strategies—will reduce traffic and pollution trends and improve public health as leaders plan for communities that are more walkable and interconnected with existing neighborhoods and commercial centers. By 2030, it is estimated that Californians will save 350 million hours from sitting in traffic, with a cumulative value of more than \$6 billion - or 20 hours and \$350 per worker per year.

"California's pioneering policies have added up to opportunity—opportunity that didn't happen by accident."

Mike Mielke

Silicon Valley Leadership Group

California climate policies are driving cleaner transportation options

AB 32 is lowering the cost of driving (30% by 2020) by delivering more efficient cars, a wider range of fuels, increased public transit, and more walkable, sustainable communities. In addition, investments of cap and trade auction proceeds are providing real benefits throughout the state, with a focus on those living in disadvantaged communities.

"I'm confident that the opportunities for me and my family will only grow as California continues to invest in clean energy."

Evangeline McDonald

Navy veteran, IBEW 569 member, and Imperial County resident

By reducing our demand for oil and providing California drivers with more fuel choices, California's climate policies are delivering cleaner fuels, insulation from gas-price volatility, healthier air, and less pollution—while our economy continues to grow.