

# CALIFORNIA'S PIONEERING CLEAN ENERGY & CLIMATE LAW

AB 32 IS ADVANCING A STRONG ECONOMY AND HEALTHY ENVIRONMENT

## OVERVIEW

The state Legislature passed AB 32 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.

AB 32 is a proven and powerful engine of innovation in California. It is already 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

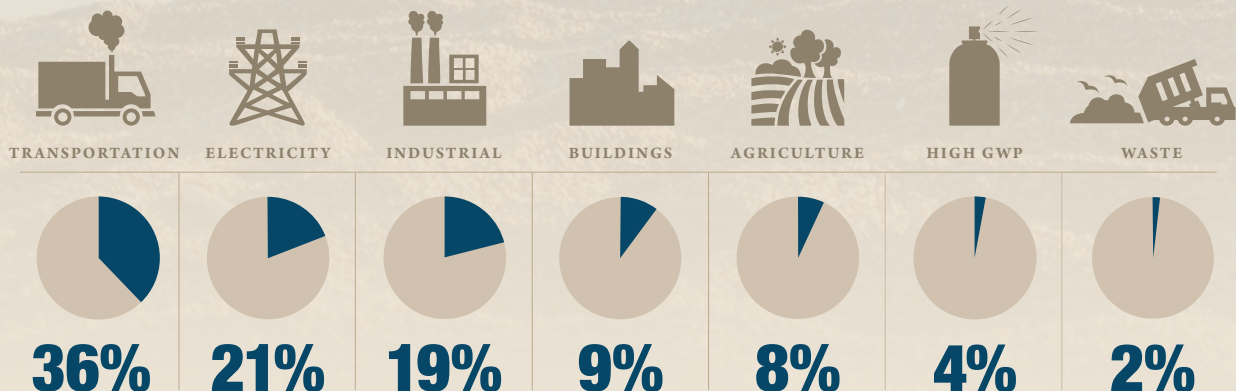
“ AB 32 is helping cement CA's leadership position in the clean energy sector. ”

EILEEN TUTT  
CALIFORNIA ELECTRIC  
TRANSPORTATION COALITION

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

PROF. HILDA BLANCO  
UNIVERSITY OF  
SOUTHERN CALIFORNIA

## WHERE DO CALIFORNIA'S GREENHOUSE GASES COME FROM?



Source: CA Air Resources Board, California Greenhouse Gas Inventory, 2012

# CALIFORNIA'S TOOLBOX FOR REDUCING EMISSIONS

**AB 32 is not just one policy. It's a full set of strategies to transition California to a clean energy economy, including:**



Reducing greenhouse gas emissions from new and used cars and trucks by improving vehicle technologies through better performance standards



Setting aggressive targets to increase energy efficiency for residential and commercial buildings and appliances



Requiring at least 33% of California's electricity come from renewable sources, such as solar, wind and geothermal



Requiring oil companies and other fuel providers to deliver an increasing share of low carbon transportation fuels



Reducing emissions from industrial plants, oil refineries and commercial facilities using flexible mechanisms like cap and trade



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 recycling goals for commercial buildings and apartment complexes

# UNDERSTANDING CAP AND TRADE

Praised as the best-designed program of its kind in the world, the cap and trade system 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.

California joins nine Northeastern states, the European Union, and five regions in China—the world's largest producer of greenhouse gases—among the major economies enforcing cap and trade programs to reduce carbon pollution.

# INVESTING AB 32 AUCTION PROCEEDS

- Protects 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

**“ CA's pioneering policies have added up to opportunity—opportunity that didn't happen by accident. ”**

DAN ADLER  
CALCEF

&

MIKE MIELKE  
SILICON VALLEY LEADERSHIP GROUP

**“ AB 32 is cutting pollution and cleaning up the air we breathe. ”**

DR. DAVID TOM COOKE  
AMERICAN LUNG ASSOCIATION  
IN CALIFORNIA



# 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. And air quality in California continues to improve because of the program's strict smog standards.

## 2. CLEAN FUELS

The Low Carbon Fuel Standard 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. By spurring greater use of clean alternative fuels and vehicles, the LCFS will result in \$1.4-\$4.8 billion in benefits by 2020 from reduced air pollution and increased energy security.

## 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.


“Producing cleaner, homegrown fuels means good union jobs.”

ROBERT LAVENTURE  
UNITED STEELWORKERS

## AN ABUNDANCE OF ALTERNATIVES ALREADY EXISTS

Many alternatives to gasoline are already available. Each fuel's carbon score is a measure of the greenhouse gas emissions associated with the combination of all the steps in its extraction, production, refining, and final use. The lower the score, the cleaner the fuel.

 Biodiesel, Inedible Corn Oil	 Biomethane	 Biodiesel, Waste Grease
4	13	14
 Renewable Diesel	 Ethanol Cellulosic	 Renewable Gasoline
20	21	25
 Electricity	$H_2$ Hydrogen	 Ethanol, Sugarcane
31	39	70
 CNG	 LNG	 Ethanol
75	80	85
 Diesel	 Gasoline	
98	99	

 FUEL  
SOURCE  
 CARBON  
SCORE



# UNDERSTANDING FUELS UNDER THE CAP

Beginning in January, California's cap and trade program expands to limit carbon emissions from transportation fuels (California's largest source of emissions) and natural gas, to make oil companies play by the same rules as electric utilities, refineries, industry and all other major emitters in California.

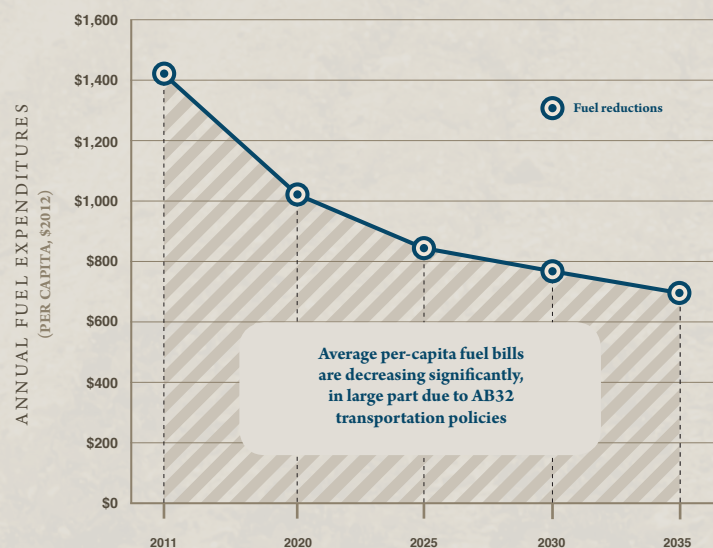
Putting fuels under the cap is part of a broader set of initiatives—including California's Advanced Clean Cars Program and Renewable Portfolio Standard—designed to reduce greenhouse gases and clean the air.

The fuels sector has had nearly a decade since AB 32 became law to prepare for compliance. Changing the rules now would penalize companies that have made investments to comply with the law and

would shift responsibility for emissions reductions onto other sectors already doing their part. Like other sectors under the cap, it's up to oil companies to decide how they pay to comply with their own pollution reduction requirements, which will be different for each company.

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.

By reducing our demand for oil and providing California drivers with more fuel choices, AB 32 is delivering cleaner fuels, insulation from gas-price volatility, healthier air, and less pollution—while our economy continues to grow.



## CALIFORNIANS' FUEL BILLS ARE GOING DOWN

Cost per gallon is an outdated measure. The important thing is that motorists' overall fuel costs are shrinking. That's thanks to improved car efficiency, more fuel choices and fewer trips to the pump. AB 32 is helping get us off the gas price roller coaster by giving consumers clean, reliable and affordable options.

Source: ARB and U.S. Energy Information Administration (EIA)

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