



## **SB 350: Golden State Standards 50-50-50**

*Authors: Senator Kevin de León and Senator Mark Leno*

### **PURPOSE:**

Create jobs, grow the state's economy, and improve public health by setting new standards for California's Renewable Portfolio Standard (RPS), reducing petroleum use, and increasing energy efficiency in existing buildings.

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### **BACKGROUND:**

#### **Renewable Portfolio Standard (RPS)**

Renewable energy is as cost-effective as fossil fuels and produces much less pollution. According to the International Renewable Energy Agency, renewable power generation costs in 2014 were either as cheap or cheaper than coal, oil, and gas-fired power plants—even without financial support and despite drops in oil prices. Solar-powered energy has had the largest cost decline, with solar PV (rooftop solar) being 75% less expensive than it was [in 2009](#).

Fifteen years ago, California enacted the nation's first law requiring energy companies to buy 20% of their power from renewable sources. Prior to this mandate, renewable energy comprised less than 8% of the overall electrical mix in the state. Within 5 years of implementation, most energy companies were close to, or had purchased under contract, enough power to meet or exceed 20% RPS.

In 2011, Governor Brown signed legislation to increase RPS to 33% by the year 2020 [SB 2-1X chapter 1 Statutes of 2011]. Currently, most energy utilities have bought or have built enough energy resources to meet the 33% RPS before the target year. Also, according to numerous studies, California's RPS standard has created hundreds of thousands of new jobs, millions of new investment and tax dollars, and significant [clean air and climate benefits](#).

This legislation increases the RPS to 50% by the year 2030.

For a description of one pathway to achieve the 50% RPS please see the following [fact sheet](#) issued by the California Energy Commission.

## **Reduction in Petroleum Use**

According to the California Air Resources Board (CARB), production, refining, and the use of petroleum accounts for nearly half of greenhouse gas (GHG) emissions, 80% of smog-forming pollution, and over 95% of cancer-causing diesel particulate matter. CARB also notes that oil dependence costs the state \$33-55 billion annually, and that reducing petroleum use and improving vehicle efficiency will cut costs and improve California's economic productivity and competitiveness.

Over the last two decades, in the effort to improve air quality, California has made cars vastly more efficient and less consuming of petroleum fuels. Using less petroleum in transportation fuels saves money, creates jobs, and reduces pollution. Over 100,000 miles, a 40 mpg car saves \$16,668 in fuel costs compared to a 15 mpg car over 100,000 miles (assuming \$4/gallon fuel costs).

This bill seeks to reduce petroleum use by 50% by the year 2030. In a CARB analysis, one pathway towards this goal could include reducing growth in vehicle-miles traveled to 4%; increasing on-road fuel efficiency of cars to 35 mpg and heavy-duty trucks to 7 mpg; and at least doubling the use of alternative fuels such as biofuels, electricity, hydrogen, and renewable natural gas. One pathway to achieve this goal can be found on the [ARB Website](#).

## **Energy Efficiency in Buildings**

Energy efficient buildings save money and reduce pollution from electricity. According to the California Energy Commission, efficiency standards return an average of \$6,200 in energy savings per household over 30 years, or \$27 per month on heating, cooling, and lighting bills. These same standards save 200 million gallons of water per year (equal to more than 6.5 million wash loads) and avoid 170,500 tons of greenhouse gas emissions per year. Since 1978, the state's standards have saved Californians [\\$66 billion in electricity and natural gas savings](#).

State energy agencies allocate over \$1.5 billion per year on energy efficiency programs. Roughly \$1 billion is spent by the California Public Utilities Commission (CPUC) and utilities via utility-sponsored programs such as rebates for high-efficiency appliances, heating and A/C systems, and insulation. In addition, Proposition 39—The California Clean Energy Jobs Act—has generated approximately \$500 million annually to assist schools in switching to clean energy and reduce energy use, which creates jobs and saves money that can be reinvested into classrooms. [see e.g. [UCLA Luskin Center Report on jobs created by Proposition 39 energy efficiency investments](#)]

Under current law, although California has energy efficiency standards for new buildings and appliances, implementation challenges include the lack of enforcement mechanisms and accountability.

SB 350 seeks to increase energy efficiency in buildings by 50% by 2030, and gives California's energy agencies the authority to review and revise our state's energy efficiency programs to marshal the funds and regulatory actions necessary to reach this target.

One pathway to achieve a 50% greater efficiency in buildings can be found [here](#).

## **PROPOSAL:**

Implement new Golden State Standards “50-50-50” benchmarks by raising California’s renewable portfolio standard from 33% to 50%, striving for a 50% reduction in petroleum use, and increasing energy efficiency in buildings by 50% by the year 2030.

SB 350 makes these standards permanent, trackable, and enforceable by enacting them into law and building on the accountability mechanisms already in existence to ensure they are fully implemented.

Each of these standards are added to existing clean air, clean energy, and climate related statutes that have been implemented for years.

The 50% renewable energy standard will be implemented by the CA Public Utilities Commission for the private utilities and by the CA Energy Commission for municipal utilities, as per current law. Each utility submits a procurement plan showing it will purchase clean energy to displace other non-renewable resources. Each state agency then reviews the plan, ensures it complies with the law and approves the plan. California has more than doubled renewable capacity installed in the last four years (adding over 11,000 megawatts) and has more than 21,000 megawatts online, which includes 2,300 megawatts on 245,000 homes, businesses, and schools.

The 50% reduction in petroleum use also will be implemented using existing laws and financial resources. Under current law, the state air board must reduce pollution in order to achieve state and federal ambient air standards. Current law (Health and Safety Code Section 42013) requires the board to adopt standards for vehicles and fuels to achieve clean air. This measure simply ensures those actions will achieve a 50% reduction in petroleum by 2030.

Finally, the 50% increase in energy efficiency in buildings will be done through the use of existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this measure requires state energy agencies to plan for, and implement those programs in a manner that achieves the energy efficiency target.