

---

UNFINISHED BUSINESS

---

Bill No: SB 350  
Author: De León (D) and Leno (D), et al.  
Amended: 9/11/15  
Vote: 21

---

SENATE ENERGY, U. & C. COMMITTEE: 8-3, 4/7/15  
AYES: Hueso, Hertzberg, Hill, Lara, Leyva, McGuire, Pavley, Wolk  
NOES: Fuller, Cannella, Morrell

SENATE ENVIRONMENTAL QUALITY COMMITTEE: 5-2, 4/29/15  
AYES: Wieckowski, Hill, Jackson, Leno, Pavley  
NOES: Gaines, Bates

SENATE APPROPRIATIONS COMMITTEE: 5-2, 5/28/15  
AYES: Lara, Beall, Hill, Leyva, Mendoza  
NOES: Bates, Nielsen

SENATE FLOOR: 24-14, 6/3/15  
AYES: Allen, Beall, Block, De León, Glazer, Hall, Hancock, Hernandez,  
Hertzberg, Hill, Hueso, Jackson, Lara, Leno, Leyva, Liu, McGuire, Mendoza,  
Mitchell, Monning, Pan, Pavley, Wieckowski, Wolk  
NOES: Anderson, Bates, Berryhill, Cannella, Fuller, Gaines, Galgiani, Huff,  
Moorlach, Morrell, Nguyen, Runner, Stone, Vidak  
NO VOTE RECORDED: Nielsen, Roth

ASSEMBLY FLOOR: Not available

---

**SUBJECT:** Clean Energy and Pollution Reduction Act of 2015

**SOURCE:** Author

---

**DIGEST:** This bill enacts the "Clean Energy and Pollution Reduction Act of 2015," which establishes targets to increase retail sales of renewable electricity to

50 percent by 2030 and double the energy efficiency savings in electricity and natural gas end uses by 2030.

*Assembly Amendments* remove petroleum reduction goals in their entirety; remove a requirement that the Air Resources Board (ARB) develop an integrated action plan to improve freight efficiency; direct the ARB to adopt measures to remove disincentives to utilities and service providers from achieving greenhouse gas emissions reductions from other sectors through transportation electrification; deem most types of work on the electric transmission system located in California as a public works project; require state agencies to complete studies on barriers to solar photovoltaic generation and to access to renewable energy by low-income customers, to contracting opportunities for local small businesses in disadvantaged communities, and to low-income customer ownership of zero-emission and near-zero-emission vehicles; require the California Public Utilities Commission (CPUC) to enforce performance standards for energy efficiency measures; require a local publicly owned electric utility with an annual electrical demand exceeding 700 gigawatt hours to adopt an integrated resource plan; and establish a process by which the California Independent System Operator (CAISO) evolves into a regional organization.

## **ANALYSIS:**

Existing law:

- 1) Directs the CEC to continually assess energy consumption trends and to analyze the social, economic, and environmental consequences of these trends; carry out, energy conservation measures; and recommend to the governor and the Legislature new and expanded energy conservation measures. (Public Resources Code §25200 et seq.)
- 2) Requires the CEC to develop and implement a comprehensive program to achieve greater energy savings in California's existing residential and nonresidential building stock. (Public Resources Code §25943 et seq.)
- 3) Requires retail sellers of electricity – investor-owned utilities (IOU), community choice aggregators (CCAs), and energy service providers (ESPs) – and publicly owned utilities (POU) to increase purchases of renewable energy such that at least 33 percent of retail sales are procured from renewable energy resources by December 31, 2020. This is known as the Renewable Portfolio Standard (RPS). The CPUC establishes the RPS for retail sellers and ensures they progress in achieving it, and levies penalties for failure. The governing

board of each POU establishes its own RPS. The CEC may issue a notice of violation against a POU for failure to adequately progress in meeting RPS targets and refer the POU to the ARB, which may assess penalties against it. The RPS provides numerous cost containment provisions and exceptions to compliance obligations. (Public Utilities Code §399.11 et seq.)

- 4) Establishes the CAISO, comprised of five board members appointed by the governor and subject to Senate confirmation, and requires it to manage the transmission grid and related energy markets and make the most efficient use of available energy resources including energy, capacity, ancillary services, and demand bid into markets administered by the CAISO. (Public Utilities Code §345.5)

This bill:

- 1) Establishes an RPS target of 50 percent by December 31, 2030, and thereafter for retail sellers and POUs, including interim targets of 40 percent by the end of the 2021-2024 compliance period, 45 percent by the end of the 2025-2027 compliance period, and 50 percent by the end of the 2028-2030 compliance period.
- 2) Specifies that costs shifting cannot occur between customers of electrical corporations and CCAs or ESPs and requires the CPUC to ensure that departing load does not experience cost increase as a result in an allocation of costs not incurred on behalf of departing load.
- 3) Includes the following provisions in furtherance of doubling the energy efficiency savings in electricity and natural gas end uses by 2030:
  - a) Directs CEC to adopt an update to the AB 758 program, by January 1, 2017 and every three years thereafter.
  - b) Defines energy savings and end uses.
  - c) Directs the CEC to specify energy efficiency targets to meet the goal, and specifies programs that may be used to achieve the goal.
  - d) Specifies how the goals will be measured and counted; makes clarifying changes.
  - e) Requires assessments of the effects of energy efficiency on electricity demand statewide and locally, hourly, and seasonally.
  - f) Directs the CPUC to authorize energy efficiency programs to meet the 50 percent energy efficiency goal.

- g) Specifies CPUC energy efficiency procurement and reporting requirements.
  - h) Directs POUs to meet the energy efficiency targets specified by the CEC.
  - i) Directs the CEC to establish consumer protection guidelines for energy efficiency products, and directs the CEC to promote greater project penetration in disadvantaged communities, and to use workforce development and job training for residents in disadvantaged communities.
  - j) Directs the CEC to evaluate "negative therm interaction" effects generated as a result of electricity efficiency improvements.
- 4) Requires ARB to identify and adopt appropriate policies to remove regulatory disincentives facing retail sellers from facilitating the achievement of greenhouse gas (GHG) emission reductions in other sectors through increased investments in transportation electrification, including an allocation of GHG emissions allowances to retail sellers to account for increased emissions in the electric sector from transportation electrification.
  - 5) Requires the CPUC, in consultation with the ARB and CEC, to direct IOUs to propose multiyear programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, achieve the goals set forth in the Charge Ahead California Initiative, and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050. Requires the CPUC to approve programs and investments that deploy charging infrastructure as distribution system costs.
  - 6) Requires the CPUC and CEC to take specific actions in furtherance of meeting the state's clean energy and pollution reduction objectives.
  - 7) Requires the CPUC to permit community choice aggregators (CCAs) to submit proposals for satisfying their portion of the renewable integration need.
  - 8) Requires the CPUC to adopt a process for IOUs, CCAs, and electric service providers (ESPs) to file an integrated resource plans.
  - 9) Requires locally owned public utilities to adopt IRPs, subject to review by the CEC.
  - 10) Requires the CAISO to prepare proposed governance modifications to facilitate the transformation of the CAISO into a regional organization

- 11) Requires the CEC to study barriers for low-income customers to access solar photovoltaic, other renewable energy, energy efficiency, and weatherization investments.
- 12) Requires ARB to study barriers for low-income customers to access zero-emission and near zero-emission transportation options.
- 13) Amends the public works provision of the Labor Code to specify that construction, alteration, demolition, installation, or repair work on the electric transmission system located in California constitutes a public works project, subjecting these projects to prevailing wage.

## **Background**

*State efforts to address environmental effects of energy use.* In California, the energy sector, broadly defined, accounts for more than 85 percent of greenhouse gas emissions. The two largest sources of California's greenhouse gases are transportation, at 39 percent, and electricity production, at 21 percent.[ 2013 Integrated Energy Policy Report (<http://www.energy.ca.gov/2013publications/CEC-100-2013-001/CEC-100-2013-001-CMF.pdf>)] Accordingly, the state's existing clean energy and climate change programs focus on the energy sector in general and the transportation and electricity sectors specifically.

Principal among those programs are the California Global Warming Solutions Act of 2006 (more commonly known as "AB 32"), which requires a reduction of the state's greenhouse gas emissions to 1990 levels by 2020, and the RPS, which requires the 33 percent of the state's electricity come from renewable resources by 2020. AB 32 tasks the ARB with developing a plan of measures that reduce greenhouse gas emission levels, to be updated every five years. To that end, ARB, in 2008, adopted a scoping plan that includes regulatory and market-based measures applicable to the state's major economic sectors. Among the regulatory measures included in the initial scoping plan were numerous energy efficiency measures, measures to encourage the development and adoption of alternative fuels, and a 33 percent RPS. In 2014, ARB released an update to its scoping plan. The ARB approved its first update to the scoping plan in May of 2014, which shows that the state has reduced its overall emissions of greenhouse gases since passage of AB 32.

The Legislature approved the statutory RPS program in 2011 with the passage of SB 2 x1 (Simitian, Chapter 1). Statute directs the CPUC to establish the RPS for retail sellers and ensure they progress in achieving it, levying penalties for failure. The governing board of each POU establishes its own RPS. The CEC may issue a notice of violation against a POU for failure the adequately progress in meeting RPS targets and refer the POU to the ARB, which may assess penalties against it. The state's electric utilities report they are on track to meet, or exceed, the RPS goals.

Other state programs directly address energy efficiency. The state's loading order, established by the energy agencies in 2003, calls for meeting new electricity needs first with efficiency and demand response, followed by renewable energy and distributed generation, and then with fossil generation. [2003 Energy Action Plan ([http://www.energy.ca.gov/energy\\_action\\_plan/2003-05-08\\_ACTION\\_PLAN.PDF](http://www.energy.ca.gov/energy_action_plan/2003-05-08_ACTION_PLAN.PDF))]. Under statute guidelines, the CPUC authorizes IOU spending for all available energy efficiency that is cost effective, reliable and feasible. In recent years the CPUC has authorized close to \$1 billion per year in energy efficiency spending to meet this mandate based on feasibility studies and the record developed in CPUC's energy efficiency proceedings. Since 1977, the CEC, acting under the broad authority provided to it under the Warren-Alquist Act, has set energy efficiency standards for appliances and new buildings; many credit these standards, in part, with keeping California's per-capita electricity consumption flat over the past three decades. [See, for example, [http://switchboard.nrdc.org/blogs/mwaltner/energy\\_savings\\_on\\_the\\_way\\_for.html](http://switchboard.nrdc.org/blogs/mwaltner/energy_savings_on_the_way_for.html)] Further, CEC, acting according to statutory mandate, recently released a draft plan to achieve cost-effective energy savings in California's existing residential and nonresidential buildings, which, generally, are not subject to CEC's building efficiency standards. [Existing Buildings Energy Efficiency Action Plan - Draft (<http://www.energy.ca.gov/ab758/>).]

*Building upon existing structure to create new "Golden Standards"*. In his 2015 State-of-the-State speech, Governor Brown announced three ambitious new energy goals that would take state clean energy policy beyond 2020: (1) 50 percent of California's electricity to come from renewable energy sources; (2) reducing by 50 percent the amount of petroleum used in cars and trucks; and (3) doubling the energy efficiency of existing buildings, all by 2030. The author has described this bill as an effort to execute on the Governor's "bold vision."

To a large extent, this bill builds upon existing state programs, which the author describes as already making significant progress to the bill's two goals. This bill

builds upon existing statutory authority to achieve the expanded RPS goal. As existing statute makes extensive, specific requirements of the RPS program, so too does this bill.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee:

- Ongoing annual costs of \$5.6 million for staffing and one-time costs of \$3.5 million in contracts [General Fund (GF) and special fund] for the CEC to implement the requirements of the bill.
- Ongoing annual costs of \$1.65 million for personnel services and \$2.3 million in operating expenses (special fund) for the CPUC to fulfill the requirements of the bill.
- Ongoing annual costs of up to \$275,000 (various special funds) for ARB to develop policies to remove regulatory disincentives and facilitate GHG reductions through transportation electrification.
- Unknown ratepayer costs to the GF and various special funds to the state, as an electricity user and ratepayer to the extent electricity prices are affected by increasing the RPS standard.
- Unknown costs pressures (special fund) for the CPUC and CEC to review renewable integration needs and consider grid integration in RPS implementation proceedings.

**SUPPORT:** (Verified 9/11/15)

350 Bay Area/Marin  
Academy of Pediatrics- California  
Advanced Energy Economy  
Alameda Building Trades Council  
Alameda County Board of Supervisors  
Alliance for Solar Choice  
American Academy of Pediatrics  
American Cancer Society Cancer Action Network  
American Farmland Trust  
American Lung Association  
American Lung Association-California  
American White Water

Annie's Natural Foods  
Artesia City Councilmember Ali Sajjad Taj  
Asian Pacific Environmental Network  
Asthma and Sinus Center  
Asthma Coalition of Los Angeles County  
Attorney General Kamala Harris  
Audubon  
Autodesk  
AzTech  
Aztec Energy  
Azul  
Baz Allergy  
Ben & Jerry's  
Beneficial State Bank  
Berkeley Mayor Tom Bates  
Berkshire Hathaway Energy  
Biosynthetic Technologies  
Blattner Energy  
Bloom Energy  
Bonnie J. Adario Lung Cancer Foundation  
Borrego Solar  
Breathe California  
Bright Power  
BYD Motors, Inc.  
CA Local conservation corps  
California Association of Sanitation Agencies  
California Bicycle Coalition  
California Biomass Energy Alliance  
California Black Health Network  
California Catholic Conference  
California Conference of Directors of Environmental Health  
California Conservation Corps  
California District Council of Ironworkers  
California Energy Efficiency Industry Council  
California Energy Storage Alliance  
California Environmental Justice Alliance  
California Equity Leaders Network  
California Federation of Teachers  
California League of Conservation Voters  
California Municipal Utilities Association

California Natural Gas Vehicle Coalition  
California Nurses Association  
California Pan Ethnic Health Network  
California Public Health Association- North  
California Solar  
California Solar Energy Industry Association  
California State Association of Electrical Workers  
California State Pipes Trade Council  
California Teamsters Public Affairs Council  
California Thoracic Society  
California Trout  
California Walks  
California Wind Energy Association  
California-Nevada Conference of Operating Engineers  
Californians Against Waste  
CalSTART  
Canadian Solar  
Catholic Charities Diocese of Stockton  
Center for Climate Change and Health  
Center for Sustainable Energy  
Center on Race Poverty and the Environment  
Central California Asthma Collaborative  
Chai Energy  
ChangeLab Solutions  
Circulate San Diego  
City of Glendale  
City of Huntington Park  
City of Los Angeles  
City of Santa Monica  
Clean Energy Collective  
Clean Energy and Clean Energy Renewable Fuels  
Clean Fuel Partners  
Clean Power Campaign  
Clean Power Finance  
Clean Water Action  
CleanTech San Diego  
Cleveland National Forest Foundation  
CLIF Bar & Co.  
Climate Parents  
Climate Resolve

Coalition for Clean Air  
Coalition for Renewables and Gas  
Coalition for Sustainable Transportation  
Coalition of California Utility Employees  
Coastal Environmental Rights Foundation  
Code REDD  
Contra Costa Building Trades Council  
Controller Betty Yee  
County of Los Angeles Public Health  
Dignity Health  
Distinguished Outreach Services  
Doctors for Climate Health  
Dr. Carl Wunsch (Harvard)  
Dr. Roger Bales (UC Merced)  
Eagle Creek  
Eagle Crest Energy  
Eco Factor  
EDF Renewable Energy  
Endangered Habitats League  
EnergyHub  
energyhippo  
Energy Source  
Environment California  
Environmental and Energy Consulting  
Environmental Defense Fund  
Environmental Entrepreneurs  
Eon Energy  
EtaGen  
First Fuel  
First Solar  
Fresno, Madera, and Kings Building Trades Council  
Friends Committee on Legislation of California  
Friends of the River  
fs energy  
Gaia Development Services  
Gap, Inc.  
Genability  
Greenbelt Alliance  
Greenlining institute  
Green Star Solutions

greentech  
GRID Alternatives  
Harvest Power  
Hawthorne City Councilmember Angie Reyes English  
Health Care Without Harm  
Health Officers Association of California  
Heat and Frost Insulators and Allied Workers  
Home Energy Analytics  
Humboldt/Del Norte Building Trades Council  
Hydropower Reform Coalition  
icontrol Networks  
Inglewood City Councilmember Eloy Morales  
Imperial Building Trades Council  
Independent Energy Producers Association  
Insurance Commissioner Dave Jones  
International Brotherhood of Boilermakers  
International Brotherhood of Electrical Workers  
International Union of Painters and Allied Trades  
Investor Confidence Project  
KB Home  
Kern, Inyo & Mono Building Trades Council  
kW Engineering  
Lancaster Choice Energy  
Large Scale Solar Association  
League of Women Voters of California  
Levi Strauss & Co.  
Lieutenant Governor Gavin Newsom  
Long Beach Mayor Robert Garcia  
Los Angeles City Council  
Los Angeles County Board of Supervisors  
Los Angeles Mayor Eric Garcetti  
Los Angeles Sustainability Collaborative  
Los Angeles Unified School District Board of Education  
Los Angeles/Orange Building Trades Council  
Lyft  
Marin Building Trades Council  
Marin Clean Energy  
Mars, Inc.  
McCarthy Building Companies, Inc.  
Medical Advocates for Healthy Air

Mercury Press International  
Mid Valley Building Trades Council  
Mission Data Empowering Energy Savings  
Moms Clean Air Force  
Montebello Mayor Jack Hadjinian  
Monterey/Santa Cruz Building Trades Council  
Motiv Power Solutions  
Mountain Riders Alliance  
Move LA  
Napa/Solano Building Trades Council  
Natel Energy  
National Parks Conservation Association  
Natural Resource Defense Council  
Nature Conservancy  
Nest  
NextGen Climate  
NextTracker, Inc  
Nobel economist Dr. Kenneth Arrow (Stanford)  
Nobel Prize-winning scientist Dr. Mario Molina (UCSD)  
Northeastern, Shasta, Trinity, Lassen & Tehama Building Trades Council  
Northface  
NRG Energy, Inc.  
Oakland City Council  
Office of Ratepayer Advocates  
OPEN  
Pacific Ethanol  
Pacific Gas and Electric Company  
Pattern Energy  
Physicians for Social Responsibility – Los Angeles  
Physicians for Social Responsibility – San Francisco Bay Area Chapter  
plotwatt  
PolicyLink  
Propel  
Proterra, Inc.  
Public Advocates  
Public Health Institute  
Rainforest Automation  
Recurrent Energy  
Redlands Area Democratic Club  
Regional Asthma Management and Prevention

Rep. Adam Schiff  
Rep. Alan Lowenthal  
Rep. Anna Eshoo  
Rep. Barbara Lee  
Rep. Doris Matsui  
Rep. Eric Swalwell  
Rep. Janice Hahn  
Rep. Jared Huffman  
Rep. Jerry McNerney  
Rep. John Garamendi  
Rep. Juan Vargas  
Rep. Judy Chu  
Rep. Julia Brownley  
Rep. Karen Bass  
Rep. Lois Capps  
Rep. Loretta Sanchez  
Rep. Lucille Roybal-Allard  
Rep. Mark DeSaulnier  
Rep. Mark Takano  
Rep. Mike Honda  
Rep. Mike Thompson  
Rep. Nancy Pelosi  
Rep. Scott Peters  
Rep. Susan Davis  
Rep. Ted Lieu  
Rep. Zoe Lofgren  
Retroficiency  
Sacramento Electric Vehicle Association  
Sacramento Municipal Utility District  
Sacramento/Sierra Building Trades Council  
San Bernardino/Riverside Building Trades Council  
San Diego Building Trades Council  
San Fernando City Councilmember Antonio Lopez  
San Fernando City Councilmember Robert Gonzales  
San Francisco Asthma Task Force  
San Francisco Board of Supervisors  
San Francisco Building Trades Council  
San Francisco Public Utilities Commission  
San Joaquin, Calaveras & Alpine Building Trades Council

San Mateo Building Trades Council  
Santa Ana City Councilmember Michele Martinez  
Santa Barbara County Air Quality Control District  
Santa Clara County Medical Society  
Santa Clara/San Benito Building Trades Council  
Sempra Energy Utilities  
Sequoia Riverlands Trust  
Service Employees International Union - California  
Sierra Business Council  
Sierra Club California  
Signal Energy, LLC  
Silicon Valley Leadership Group  
Small Business California  
SmartWool  
Solar City  
Solar Energy Industries Association  
Sonoma Clean Power  
Sonoma County Asthma Coalition  
Sonoma, Mendocino & Lake Building Trades Council  
South Yuba River Citizens League  
Southern California Edison  
Southern California Public Power  
Southwest Wetlands Interpretive Association  
Stanislaus, Merced & Mariposa Building Trades Council  
State Association of Electrical Workers  
State Building and Construction Trade Council of California  
Stem, Inc.  
Sun Edison  
Sungevity  
Sunpower  
Superintendent of Public Instruction Tom Torlakson  
Sustainable Power Group  
Symantec  
The Utility Reform Network  
Thinkshift Communications  
TransForm  
Treasurer John Chiang  
Tri-Counties Building Trades Council  
Trust for Public Lands  
Tulare County Citizens for Responsible Growth

U.S. Senator Boxer  
U.S. Senator Feinstein  
Unilever  
Union of Bricklayers and Allied Craftworkers  
Union of Concerned Scientists  
Union of Elevator Constructors  
United Union of Roofers, Waterproofers and Allied Trades  
US Green Building Council  
UtiliSave  
Valley Clean Air Now  
Verdafera  
Vivint Solar  
Vote Solar  
Watersmart Software  
Watsonville City Council  
WeatherBug Home  
Western Council of Sheet Metal Workers  
Western State Council  
Wireless Advanced Vehicle Electrification

**OPPOSITION:** (Verified 9/11/15)

None received

**ARGUMENTS IN SUPPORT:** Supporters note the need to build upon the success of the state's existing clean energy policies and note many co-benefits, such as cleaner air, innovation forcing, and energy supply diversity, and the value of as a leader in the fight against climate change and for clean energy.

**ARGUMENTS IN OPPOSITION:** Opponents contend the bill will lead to higher energy prices, which the state's poorest members will be least able to pay.

Prepared by: Jay Dickenson / E., U., & C. / (916) 651-4107  
9/11/15 21:12:29

\*\*\*\* END \*\*\*\*