# SB 100 – Frequently Asked Questions

1. **Is this an aspirational bill, or is 100 percent clean electricity by 2045 a practical, feasible goal? What will happen if we don't meet the goal on schedule?**

   SB 100 is not an "aspirational" bill. It sets a 100% clean, zero carbon, and renewable energy requirement for California's electricity system by 2045. It further requires state agencies regulating energy, clean air, and climate response to implement the requirement in all proceedings authorized under law.

   Entities that fail to meet the requirement are subject to penalties under the Renewables Portfolio Standard (RPS) statutes and other potential enforcement actions by state agencies. In addition, parties may petition courts for remedies if regulated entities fail to comply.

2. **Besides reducing California's greenhouse gas emissions, what are other benefits of 100 percent clean electricity for our people?**

   - Jobs and economic growth throughout California
   - Reduced local pollution from reduced fossil fuel use
   - Cleaner, healthier air and less pollution in vulnerable communities where power plants are often located

3. **How will SB 100 affect Californians' utility bills?**

   Many factors affect utility bills. Costs associated with electricity generation is one key component; even now, clean renewable and zero-carbon energy like solar and wind energy are cheaper than natural gas, coal, nuclear, or almost any other option. So we know that at least that component of utility bills will go down as a result of SB 100.

   Of course costs of transmission, distribution, and programs utilities run in the public interest such as energy research and low-income energy assistance, and other factors affect our utility bills as well.

4. **How will it affect the price of natural gas?**

   The price of natural gas is affected by supply, demand, the cost of acquiring electricity from outside California, and other factors. But as noted above clean energy is now cheaper than gas – and will ultimately replace natural gas generation as a source of electricity.

5. **Will achieving 100 percent clean electricity mean we'll have to use nuclear power?**

   Existing nuclear power in CA has been shuttered (San Onofre Nuclear Generating Station in San Diego County) or is being phased out (Diablo Canyon Nuclear Generating Facility in San Luis Obispo County). No new nuclear power plants are proposed in the state at this time.

6. **What about hydropower from dams – will that count? Will SB 100 mean taxpayers will be asked to pay for more dams?**

   To the extent EXISTING hydroelectric power is zero-carbon and does not result in resource shuffling or increases in greenhouse gas emissions, it counts towards the 100% clean, zero carbon, and renewable energy requirement. This is primarily because existing hydro in CA is used to serve the CA load, is cheap for ratepayers, and is already built with costs accounted for in electric bills.

   SB 100 does not create any NEW incentives for new hydro to be built or operated, as hydro power only counts under the conditions described above. In other words, hydro power from new dams built would not count towards the SB 100 target.

   Most dams today are built with a combination of private funds from those who benefit from their construction, along with public funds for "public benefits" (e.g. recreation, flood protection, public safety), and not from ratepayer or general taxpayer funds.

7. **Will the electrical grid have to be reconfigured before we can get to 100 percent clean electricity? If so, what will the cost be, and how will it be paid for?**

   In general, SB 100 will help make the grid more efficient and less expensive by ensuring the cheapest/cleanest resources are used for generation and the grid is expanded to accommodate them efficiently.

   The electrical grid is in a constant state of reconfiguration. As new generation resources are built, and older resources are retired, the grid is changed to accommodate them. Moreover, rooftop solar, energy storage, demand management, energy efficiency, and other activities lead constantly to changes in the grid, and mostly for the better. The allocation of transmission and distribution costs is complex—it depends on how each utility or retail seller imports and exports its power, transmission charges assessed to bring that power in from another system, and other factors.

8. **Please explain how the mix of clean electricity sources changes over time between now and 2045 – "the first 60 percent, and the last 40 percent."**

   SB 100 requires that at least 60% of electricity be generated for CA by 2030 from "eligible renewable energy resources (solar, wind, geothermal, biomass, small run-of-the-river hydro, and renewable methane). The remaining 40% can come from any of those resources, plus existing large hydro and any other zero-carbon polluting resource. This latter provision leaves the door open to new technologies we may not know about today that could meet future state needs while protecting the environment.

9. **What is the Renewables Portfolio Standard (RPS)?**

   The Renewables Portfolio Standard (RPS) is a law (Public Utilities Code Article 15 (commencing with Section 399.11 et seq)) that requires retail sellers of electricity (Investor–owned utilities or IOUs, Publicly owned utilities or POUs, Community Choice Aggregation programs or CCAs, and Electric Service Providers or ESPs) to procure increasing amounts of renewable energy over time from the clean sources listed in no. 8, in order to displace fossil fuels or other generation, and to increase jobs, investment, and clean energy used by CA customers.

SB 100 updates the RPS to ensure that by 2030, at least 60 percent of purchased electricity in California will be from renewable sources. Between 2030 and 2045, 60 percent must be from renewable sources, but other sources, such as large hydroelectric dams (power considered clean but not "renewable") may also count toward achieving 100 percent clean electricity.

**10. What are some of the technical advances, either currently in operation or in the pipeline, that will make 100 percent clean electricity possible by 2045?**

- Wind and solar are getting cheaper every day
- Distributed generation, energy efficiency, transportation electrification, demand response, and advances in energy storage all will help the grid operate cleaner, cheaper and more efficiently.

**11. Who are the supporters of this bill? Who opposes it?**

**REGISTERED SUPPORT / OPPOSITION** (7/7/17)

**Support**

350 Bay Area

350 Sacramento

Alliance of Nurses for Healthy Environments

American Academy of Pediatrics, California

American College of Physicians – California Services Chapter

American Lung Association in California

American Wind Energy Association California Caucus

AquaHydrex

Asian Pacific Environmental Network

Audubon California

Azul

Berkshire Hathaway Energy

California Biomass Energy Alliance

California Black Health Network

California Coastal Protection Network

California Community Choice Association

California Compost Coalition

California Conference of Directors of Environmental Health

California Environmental Justice Alliance

California Interfaith Power & Light

California League of Conservation Voters

California Low Carbon Fuel and Energy Coalition

California Public Health Association – North

California ReLeaf

California Thoracic Society

California Wind Energy Association

CalPIRG

Carbon Cycle Institute

Center for Climate Change and Health, Public Health Institute

Center for Community Action and Environmental Justice

Center for Sustainable Energy

Center on Race, Poverty & the Environment

Ceres

City of Santa Monica

Clean Power Campaign

Clean Water Action

Climate Action Campaign

Controlled Thermal Resources

Dignity Health

Earth Justice

EDF Renewable Energy

Environment California

Environmental Defense Center

Environmental Defense Fund

First Solar, Inc.

Fix the Grid Coalition

Fossil Free California

Fresno Madera Medical Society

Friends of the Earth – US

Greenlining Institute

Health Care Without Harm

Health Group
Human Impact Partners
Imperial Irrigation District
Large-scale Solar Association
Lutheran Office of Public Policy – California
Merced Mariposa Asthma Coalition
Natural Resources Defense Council
NextGen California
Office of Ratepayer Advocates
Pesticide Action Network
Prevention Institute
Public Health Institute
Regional Asthma Management and Prevention
San Francisco Asthma Task Force
San Francisco Bay Area Chapter, Physicians for Social Responsibility
SanDiego350
Seventh Generation Advisors
Sierra Club California
Solar Energy Industries Association
Southern California Public Power Authority
The Trust for Public Land
U.S. Green Building Council
Union of Concerned Scientists
Vote Solar
Westlands Solar Park
Wholly H2O

**Opposition**

Agricultural Council of California
Agricultural Energy Consumers Association
Almond Alliance
Association of California Egg Farmers
California Association of Wheat Growers
California Bean Shippers Association
California Blueberry Association
California Chamber of Commerce
California Cotton Ginners and Growers Association
California Dairies Inc.
California Farm Bureau Federation
California Fresh Fruit Association
California Grain and Feed Association
California Manufacturers & Technology Association
California Pear Grower Association
California Seed Association
California Warehouse Association
Milk Producers Council
Pacific Egg & Poultry Association
Pacific Gas and Electric Company
Southern California Edison
Western Agricultural Processors Association
Western Growers Association