



# The California Energy Commission Developing Renewable Energy

The California Energy Commission is involved in many efforts to promote and support renewable energy development. These include supporting the Renewables Portfolio Standard (RPS), ensuring that the state's utilities disclose their electricity supply portfolio to consumers, funding solar photovoltaic installations on new single-family and multifamily homes, distributing renewable energy conservation planning grants to local governments, providing incentives for the development of geothermal resources, addressing barriers to bioenergy development, and tracking the state's progress toward its renewable goals.

## Accelerating Renewable Energy Development

The Energy Commission and the California Public Utilities Commission (CPUC) jointly administer the RPS program, requiring all utilities to procure 50 percent of retail sales from renewable resources by 2030. The Energy Commission is responsible for certifying renewable resources as RPS-eligible, verifying the eligibility of all renewable electricity claimed toward the RPS target, and determining compliance for more than 40 publicly owned electric utilities in California. The CPUC determines and enforces RPS compliance for investor-owned utilities using verified generation data provided by the Energy Commission and approves utility renewable resource procurement plans and contracts for RPS-eligibility.

As part of the RPS program, the Energy Commission is closely involved with the Western Renewable Energy Generation Information System (WREGIS), an electronic renewable energy registry and tracking system for 14 western states, two Canadian provinces, and Baja California, Mexico. WREGIS data

and reports are integral to ensuring that renewable electricity claimed for California's RPS is not double-counted in California or any other state.

## Informing Consumers

The Energy Commission is also responsible for implementing California's Power Source Disclosure Program that predates the RPS. The program requires electric utilities to provide simple and accurate information to customers about where their electricity comes from. Electric utilities must annually submit data to the Energy Commission on their fuel mix and provide a "power content label" (the percentage of electricity that comes from conventional resources and eligible renewable resources). Beginning in 2020, electric utilities will have to disclose to customers the greenhouse gas emissions intensity of their supplier's electric service products. All power content labels are available on the Energy Commission's website for customers to compare the power mix of electric utilities.

## Encouraging Solar Photovoltaics on New Homes

In 2006, the Legislature established the goal of encouraging Californians to install 20,000 megawatts of solar energy systems on homes and business by the end of 2020, making renewable energy an everyday reality. The enabling legislation has three components: the Energy Commission's New Solar Homes Partnership program, the CPUC's California Solar Initiative program, and solar incentive programs by the state's publicly owned utilities.

The New Solar Homes Partnership focuses on new residential construction. The CPUC's program focuses on existing residential and existing or new commercial, agricultural, government, and nonprofit buildings, as well as solar thermal water heating, low-income programs, and research and development. Publicly owned utilities provide a variety of rebate programs for solar installations in the residential and commercial sectors.

Under the New Solar Homes Partnership, the Energy Commission gives financial incentives to builders to include solar as an option in new home developments. This contributes to California's goals to reduce greenhouse gas emissions, promote renewable energy development, support zero-net-energy buildings, and make solar on new homes a standard feature.

Part of the Energy Commission's responsibilities includes developing eligibility criteria for all of California's ratepayer-funded solar incentive programs. The Energy Commission publishes and updates program guidelines that explain these criteria, along with an extensive list of equipment that meets the eligibility criteria for state solar incentive programs.

## Fostering the Development of Geothermal Resources

In 1980, the Energy Commission established a program to fund research and development projects by local jurisdictions, later expanded to include private entities, for resource exploration and assessment, demonstration projects, local planning and zoning related to geothermal energy, and identifying ways to reduce adverse impacts of geothermal development.

Projects funded through the program include space and water heating in schools and hospitals, recharging declining geothermal wells with wastewater to increase steam production, and projects to identify the availability of geothermal resources for electricity production.

## Planning for Renewable Energy

The Energy Commission provides grants to qualified counties to develop rules and policies to help plan and permit renewable energy projects that further California's energy and environmental policy goals. These grants also support state efforts under the Desert Renewable Energy Conservation Plan to develop guidelines that help identify areas suitable for renewable energy development and transmission corridors, while developing long-term natural resource conservation areas that protect fragile desert ecosystems.

## Addressing Barriers to Bioenergy Development

State agencies are collaborating to identify challenges and opportunities for promoting the wider use of bioenergy in California's *Bioenergy Action Plan*. The Energy Commission provides significant technical and administrative support for this activity.

## Tracking Renewable Energy Development

The Energy Commission provides quarterly updates on California's progress in meeting its clean energy goals, including those for renewable energy. A Tracking Progress web page includes statistics on how much renewable electricity is generated each year in California, the number and type of renewable power plants in the state, the development status of large renewable facilities under the Energy Commission's licensing jurisdiction, and progress toward meeting the RPS goal, as well as the state's goal of adding 12,000 megawatts of renewable distributed generation.

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