

KEEP IT GOLDEN

RESIDENTIAL RATE REFORM/TIME-OF-USE FACT SHEET

What efforts is California making across the state to reduce greenhouse gas emissions from electricity generation and integrate renewable energy?

Over the past two decades, California has undergone a transformation focused on making more of the state's electricity needs come from renewable energy sources. These efforts are tied in part to the state's goal to become a zero-carbon state by 2045.

While Californians have always had the power to support the state's environmental goals by participating in activities such as energy efficiency, beginning in 2019 they will have even more options. These choices will empower them to harness the availability of clean energy, while supporting efforts to conserve electricity at home or at their place of business.

Energy Upgrade California®, a statewide initiative created by the California Public Utilities Commission to help Californians take action to save energy, has developed a statewide public education campaign focused on this new energy vision for California.

What is the driving force behind California's goals to become a zero-carbon state?

In [2015](#), former California Gov. Jerry Brown signed Senate Bill 350 (SB350) – the Clean Energy and Pollution Reduction Act. This legislation aimed to double statewide energy efficiency savings in electricity and natural gas use, and derive much of the state's electricity needs from renewable energy sources. SB350 is also intended to help the state reach a long-term climate goal of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.

In 2018, former Gov. Brown signed Senate Bill 100 (SB100) that will require that 100 percent of all electricity delivered to Californians be derived from renewable energy sources by Dec. 31, 2045.

What does it mean to be a state where 100 percent of electricity used is derived from renewable energy sources?

Currently, both non-renewable and renewable resources are used to produce electricity in California. The state's electric grid is increasingly powered by clean, renewable sources of energy; when the sun is out and the wind is blowing. The challenge is in the late afternoon and evening, when demand for energy rises and renewable energy generation declines. At this time, electricity is more likely to be produced by non-renewable energy sources, which emits greenhouse gases.

Energy storage is currently expensive and is limited to obtain in the quantities needed. As technology progresses, it will assist in harnessing renewable power to homes and businesses in the evening hours. Therefore, when clean energy is generated during off-peak times it creates an opportunity for Californians to not only think about *how*, but also *when* electricity is used to power their daily lives.

How are the state's goals affecting Californians electricity use?

For California to achieve the long-term goals to reduce greenhouse gas emissions and become a zero-carbon state, the trend to produce more electricity from renewable resources must continue. Over the past decades, Californians have done a great job conserving energy and becoming more efficient. They can continue that progress and help the state reduce harmful emissions and take additional steps toward sustainability.

The availability of cleaner energy during the day creates an opportunity for Californians to not only think about *how*, but also *when* electricity is used to power their daily lives.

In response to AB 327 (Perea, 2013), in 2015, the [California Public Utilities Commission](#), which regulates investor-owned utilities, protects consumers, safeguards the environment, and assures Californians' access to safe and reliable utility infrastructure and services, approved the Residential Rate Reform decision (D.15-07-001). This decision ordered the state's major investor-owned utilities (IOUs), [Pacific, Gas & Electric \(PG&E\)](#), [Southern California Edison \(SCE\)](#) and [San Diego Gas & Electric \(SDG&E\)](#) to transition residential customers to time-of-use (TOU) rate plans beginning in 2019.

What is a "time-of-use" (TOU) electricity rate plan?

TOU is a rate plan in which rates vary according to the time of day, season and day type (weekday or weekend/holiday). Electricity prices are higher during peak demand hours and lower during off-peak hours. Peak times may vary by rate and/or energy provider.

TOU plans also encourage a cleaner power grid by using energy when renewable resources, like solar power, are readily available.

Energy Upgrade California® recommends that specific questions related to specific TOU rate plans be directed to the state's IOUs. Questions surrounding the Residential Rate Reform decision (D.15-07-001) that informed the TOU rate structure should be directed to the CPUC.

It is important to note that all TOU plans share a common theme – *when* electricity is used matters as much as *how* much electricity is used.

According to the CPUC, the CEC and CAISO the state's electricity grid reaches its peak level of usage between the late afternoon and early evening

– a timeframe where electricity produced by renewable resources is not available and thus costs more to produce.

Under the new TOU plans, Californians will be encouraged to efficiently use power during this peak period (generally defined as the hours between 4 and 9 p.m.*) and shift usage to other parts of the day when electricity from renewable resources is more readily available and costs less to produce.

*Peak times may vary by rate and/or energy provider.

What is Energy Upgrade California® doing to educate Californians about the shift to “time-of-use” (TOU) electricity rate plans?

TOU plans create another opportunity for Californians to manage their energy consumption, by harnessing the availability of low-cost cleaner energy available during non-peak hours.

Energy Upgrade California® is expanding its statewide public education campaign to promote energy efficiency (the “*how much*” electricity is used) to also encourage behaviors that will support the shift to TOU plans (the “*when*” electricity is used).

Details related to specific rate plans are better answered by the state’s major investor-owned utilities (IOUs).

Is there a specific timeframe when “time-of-use” (TOU) plans go into effect?

TOU pricing plans have been in effect for large business customers across the state since the 1980s, and small business customers began rolling onto TOU plans beginning in 2009. By Commission order, each of the IOUs conducted both an opt-in and default pilot of TOU rates for residential customers, with the latter encompassing roughly 630,000 customer accounts across the state.

Following Sacramento Municipal Utility District (SMUD), San Diego Gas and Electric (SDG&E) will be the first investor owned utility (IOU) transitioning its residents to TOU plans.

Questions about specific rate plans should be directed to SDG&E. PG&E and SCE will begin defaulting customers in late 2020. For information on what customers will not be defaulted to TOU, please contact the CPUC.

Since all TOU plans share a common theme—*when* electricity is used matters as much as *how much* electricity is used—EUC is encouraging all Californians to initiate energy savings during the peak hours of 4 to 9 p.m.,* such as:

- Turning off all but essential lighting
- Charging your devices overnight
- Using less hot water by operating washing machines and dishwashers during off-peak hours or on cold water
- Pre-cooling your home outside of peak demand hours
- Setting the thermostat for your air conditioner at a higher temperature when it is running

- Installing timers on electricity-consuming appliances such as electric water heaters; indoor and outdoor lighting; water recirculation pumps; pool and spa pumps
- Using timers to run appliances like dishwashers, washing machines, and ovens during the middle of the day (11 a.m.–3 p.m.)

What is “Keep it Golden”?

Keep It Golden serves as a rallying cry for all Californians to use energy better.

Who is Energy Upgrade California®?

Created by the California Public Utilities Commission (CPUC) in 2011, **Energy Upgrade California®** (EUC) is a statewide education, advocacy and outreach initiative to promote energy management concepts, energy efficiency actions and clean energy opportunities for the state’s residents and businesses.

Energy Upgrade California® is uniting the state in a movement to help California thrive through smarter energy use. For more information visit www.energyupgradeca.org.

*Peak times may vary by rate and/or energy provider.



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