

# California's big bright renewable future

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IT'S NO SECRET that renewable energy is on the rise across America, and California is leading the way—with astonishing speed.

California's pedal-to-the-metal approach has worked astoundingly well in achieving its primary goal: the rapid proliferation and adoption of a clean energy infrastructure capable of turning back the clock on carbon emissions—slashing them 40 percent by 2030.

New markets created through state-mandated contracts between electric companies and developers of large-scale solar and wind-power projects have helped pave the way for commercially viable technologies, which have become much cheaper to manufacture and buy.

Generous subsidies have sparked demand for private rooftop solar arrays, driving prices through the floor and installation numbers to the sky. Smart investments in the energy grid have made it more resilient, flexible, and able to support new technologies. And California's clean-energy economy has boomed.

PG&E's service area alone now accounts for 25 percent of all private solar rooftops in the nation. In recent years, the solar stampede has accelerated so swiftly that the trend line has gone vertical:

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What started with just 163 homes in 2000 stands at more than 250,000 today. By 2025, we expect to have connected more than 600,000 solar customers to the electric grid.

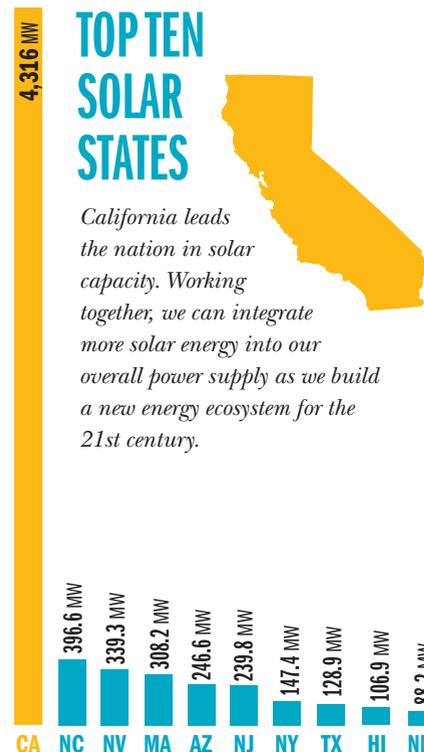
That growth has occurred not in spite of PG&E's

best efforts, but because of them. New solar panel owners now enjoy the fastest connection time in the nation, using an entirely automated process. In 2015 alone, we invested \$6 billion in modernizations that enable greater inflows of renewable energy while ensuring that all of our customers continue to have reliable service whether the days are sunny or cloudy; the nights breezy or calm.

We also know that not everyone who wants private solar energy is in a position to get it. Some homeowners can't afford the cost. Many lack the rooftop space or optimal exposure for solar panels, while others are urban renters in multi-unit buildings.

That's why for the past 11 years, we've covered the cost of putting solar panels on every new Habitat for Humanity home across the length and breadth of our service area. And earlier this year, we launched Solar Choice, a program that provides PG&E customers with the option of purchasing up to 100% renewable energy for a small premium—without having to install solar panels on their roof.

Of course, solar energy can't solve the clean energy equation by itself, nor can any other single technology. We support all consumer energy alternatives and are delighted to help our customers make use of them wherever possible. But we can't afford to bet the planet on such individual conversions. We're not going to get where we need to go one rooftop at a time.



Achieving the steep reductions in greenhouse gas that are the hallmark of California's forward-thinking leadership can only happen through a fundamental transformation of our energy infrastructure. That's where companies such as PG&E can make a crucial difference.

As private businesses designed to serve the public interest, California's energy providers have demonstrated that we can move renewable energy markets and drive down costs, while keeping

the grid reliable, customer bills affordable, and the economy growing. But maintaining our ability to do so—much less speeding up that work as the state has directed—will require policies able to keep up with forces that are changing the energy business in profound ways, and making today's regulatory framework obsolete.

We support the strategy of aiming high and thinking big. As fast as California's progress on renewables has been, we believe that building on those gains can best be accomplished by taking further advantage of the unique ability of companies like ours to take on big problems and tackle them in big ways.

And the bigger, the better.

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