

A CONVERSATION ON CALIFORNIA'S CLEAN ENERGY FUTURE

We're in this together

BY TONY EARLEY, CHAIRMAN & CEO, PG&E CORPORATION

YOU WON'T FIND MANY PEOPLE IN California who still question the reality of climate change. Our parched hills, dry lakes, and snowless mountain peaks offer compelling evidence that the weather extremes could be more frequent than ever.

You won't find many industries more affected by climate change than California's energy utilities. A group of Caltech experts observed that these tectonic forces reshaping the world's electrical systems "represent one of the greatest challenges industrial societies have yet undertaken... the scale and scope of the change needed is unprecedented."

The job ahead of us is huge, and the stakes enormous.

Our familiar web of power lines — constructed to assemble a predictable flow of electricity using a stable network of known producers, and

deliver it in a single direction — must evolve into a 21st century energy grid—a dynamic, all-points exchange able to absorb electrons made from sun, wind, and water by virtually anyone; store and distribute them according to demand; and do so cleanly, affordably, and safely, without disruption.

Just as California can't solve the problem of climate change by itself, we in the utility industry can't build that 21st century energy grid without the contributions of people in every sector of our economy, from industry and agriculture to small businesses and households.

It will take collaboration from our customers and policy makers to support the huge levels of investment required. It will take innovative partners, many of them based here in California, who are providing technology for cleaner energy production and more efficient ways to light, heat, and operate our homes and offices. It will take work with the public sector to keep funding promising new technology. And it will take cooperation with our schools and colleges to help prepare the next generation of talent to manage, operate, and improve our infrastructure.

The bad news is there is no simple answer. The good news is that work on solutions is well underway. In just a few years, we have gone farther and faster in greening California's energy stream than many of us ever imagined.

California has adopted the nation's most comprehensive market-based approach—called cap-and-trade—to lower carbon emissions as cost-effectively as possible. This April, Governor Brown

took the next step, signing an executive order establishing the most ambitious greenhouse gas reduction target in North America. The new goal aims to reduce emissions 40 percent below 1990 levels by 2030. We support the Governor's pursuit of even greater emissions reductions.

California has the opportunity to set an example in showing the country—and the

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world—how to make the transition to a low-carbon future, while still enjoying the fruits of all our technological progress.

As California's largest energy utility, at Pacific Gas and Electric Company we're doing our part now and will do even more in the future. Today, 27 percent of the power we sell comes from solar, wind, hydro, and other renewable energy. More than half comes from sources that emit no greenhouse gases. From 2008 to 2013, we cut our greenhouse gas emissions by a third. And every unit of electricity we sell today creates only about a third as many greenhouse gases as the national utility average.

In the coming weeks, we will share with you more details of how we think about energy generation and storage, clean transportation, customer solar, and more. We hope with this series of messages to stimulate a dialogue and hear from you about the ways we can work together to transform that vision into a reality.

California's Current Goals

40%

Reduction in Emissions

California's current clean energy goals include working to reduce emissions to **40% below 1990 levels by the year 2030.**

PG&E is proud to partner with our customers to help achieve the state's ambitious goals for reducing greenhouse gas emissions.