

## A CONVERSATION ON CALIFORNIA'S CLEAN ENERGY FUTURE

# Building a better California

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

**CALIFORNIA'S FUTURE IS TIED TO CLEAN ENERGY.** Our people, our policymakers, and our industries all want it—along with the many benefits green power offers—as quickly as possible. Nothing underscores that more than California's ambitious new target to deliver half of the state's power from renewable energy by 2030 and cut greenhouse gas emissions 80 percent below 1990 levels by 2050.

How well we make the transition will also determine California's fate—not just in protecting the environment, but in preserving our prosperity. Whatever the source, our modern lives and the technologies that enable them will always require a stable, abundant, and affordable energy supply.

That's the challenge facing today's utility companies. And it is the mission that guides us as we build the new energy infrastructure that our state expects and deserves.

Together, we've made extraordinary progress. In just a few short years since the state's energy crisis, California's electric utilities have dedicated billions of dollars to increasing renewable energy supplies. As a result, our electricity is cleaner and more broadly sourced than ever. We lead the nation in rooftop solar, energy efficiency, and electric vehicles.

## How well we make the transition will also determine California's fate—not just in protecting the environment, but in preserving our prosperity.

Yet, the energy policies and technologies that brought us this far won't be enough to get us where we need to go.

As a recent report by the Bay Area Council noted, "the pace of innovation is increasingly



*The "Grid of Things" will serve as the platform for integrating and optimizing all the new clean energy technologies California's future will require.*

pushing up against the physical constraints of California's legacy energy and communications infrastructure. Without upgrading... California will not keep up with the level of competition and the rate of change in today's global economy."

Thankfully, California has five of the leading energy utilities in the U.S. While each has a different

business model, all seem to share a common view that we can't be stuck in a 20th century world.

At PG&E, we are working to trans-

form a one-way electric grid into an interactive energy network able to manage two-way power flows from an unprecedented variety of solar, wind, and storage resources. We were the first utility in the nation to install "smart" meters for

nearly all of our customers; then use that technology to help us learn how people are using our system, as well as diagnose and repair any outages with automated "self-healing" circuitry. And we have completed one of three brand new electric distribution centers to control and manage the multi-directional power and information flows that such a network demands.

We are creating a "plug and play" capacity that will allow customers to connect their own equipment to the grid, from rooftop solar panels to storage batteries and intelligent thermostats. For example, we are proposing to install thousands of electric vehicle charging stations across the length and breadth of our 70,000-square-mile service area.

Much like the often-touted "Internet of Things," this "Grid of Things" will serve as the platform for integrating and optimizing all of the new energy technologies California's future will require—and so help fight climate change, improve the productivity of our economy, and increase the resiliency of our energy supply.

It is also true that California policymakers have shown a strong commitment to grid modernization, but they must realize that vision will also require new regulatory approaches to ensure the continued investment necessary to develop new infrastructure, explore innovation for tomorrow, and ultimately build a better California.

That, after all, is the reason PG&E exists. That's the job the citizens of California gave us to do, and it's been our public trust for more than a century. It's a challenge we are eager to take on, and one we look forward to meeting for another hundred years and beyond.

To read more columns, visit [pge.com/CleanEnergyCA](http://pge.com/CleanEnergyCA)