

## Why Nuclear Power Is Part of Our Future

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### IT SURE LOOKS ATTRACTIVE AS CONGRESS PREPARES TO TAX CARBON.

By [JIM ROGERS](#)

America is falling behind in the race to develop green energy technologies. As John Doerr, a partner at the venture-capital firm Kleiner Perkins Caufield & Byers, recently told a U.S. Senate energy panel, “The United States led the world in the electronics revolution, and we led in biotechnology and the Internet. But we are letting the energy technology revolution speed by us.”

Mr. Doerr noted that the U.S. is home to only one of the top 10 wind turbine producers, only one of the 10 largest photovoltaic solar panel producers, and only two of the top 10 advanced-battery manufacturers.

China is leading this race, and I saw this first hand during a recent trip there. China has doubled its wind-energy capacity each of the past four years, and it is expected to become the world’s largest manufacturer of wind turbines this year. It is already the world’s leading producer of solar panels. The Chinese understand that clean-energy technologies are the key to controlling their energy future.

However, while the U.S. may be trailing on renewable energy and storage technology, we are still the world’s largest operator of commercial nuclear power.

We have 104 licensed commercial nuclear reactors—generating about 20% of our electricity and more than 70% of all carbon-free electricity. My company, the North Carolina-based Duke Energy, has seven reactors and we are planning three more. France operates 58 reactors and China has 11, but it is currently building 24 more.

Additionally, the U.S. remains a leader in researching and developing nuclear technologies. Our national labs and private sector know-how provide the resources and the scientific foundation for the U.S. to compete as a global leader in commercial nuclear power.

Our private-sector expertise and interest in new nuclear plants is causing regional energy hubs to sprout up, creating thousands of well-paying jobs. In our headquarters city of Charlotte, N.C., Toshiba America Nuclear Energy recently announced it is adding about 200 new jobs and investing nearly \$3 million to establish a nuclear power construction management center.

Also in Charlotte, Siemens Energy is adding over 220 new jobs over the next five years and investing \$50 million to grow its local power facility, which employs 780. The Shaw Group located and expanded its 1,000-employee Power Group here. Similar stories are being repeated around the country. This naturally occurring, market-driven expansion of nuclear jobs didn't have anything to do with stimulus spending.

We must maintain this momentum. Not only is this a major shot in the arm for our local and national economies, but with zero greenhouse gas emissions, nuclear power is tailor-made for addressing climate change. This is critical as Congress prepares to put a price on carbon.

Investing in new nuclear power plants, which produce electricity 24 hours a day and seven days a week, can be a major growth engine for our economy. Nuclear plants can be located close to growing demand centers, and next to existing transmission lines. Renewables, which produce power intermittently, must often be sited far from cities and the grid.

According to industry estimates, building a new nuclear plant can result in the creation of 1,400 to 1,800 jobs during construction, with peak employment as high as 2,400 jobs. Operating a new plant can generate 400 to 700 permanent jobs that can pay almost 40% more than average local salaries. These are good, long-term jobs—the kind you can raise a family on.

Additionally, each year the average nuclear plant generates approximately \$430 million in sales of goods and services in the local community and nearly \$40 million in total labor income, including both direct and secondary economic impacts. Imagine the economic stimulus if the 26 or so new nuclear plants currently planned for the U.S. were fully developed.

To generate electricity that is affordable, reliable and clean as we transition to a low-carbon future, we must also invest in and expand our use of wind, solar and other new renewable energy technologies. Duke Energy alone is poised to become one of the 10 largest wind energy producers in the U.S. this year.

When it comes to creating thousands of 21st century jobs—energy jobs on which we can rebuild the middle class—nuclear power clearly has the edge. We can and must grow our lead.

**Mr. Rogers is chairman, president and chief executive officer of Duke Energy Corporation.**

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