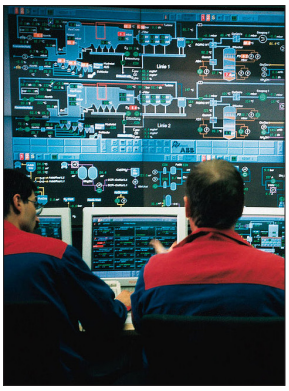
EDF ENVIRONMENTAL DEFENSE FUND®
Finding the ways that work

ENERGY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The Promise of Utility 2.0

Acquire more customers, sell more electricity and build more power plants. This formula has fueled the success of utility companies in America for well over a hundred years. But today, in an era when demand for electricity is falling and customers are technologically savvy, price conscious, and environmentally aware, this "business as usual" scenario is out of sync with innovations in technology, business realities, and evolving customer needs. We need a new model that empowers businesses and families alike to take control of their electricity use and reduce harmful pollution.

"The future is not always 10 years away."

– Ernest Moniz, U.S. Secretary of Energy

Out with the old, in with the new

As prices for electricity increase, energy efficiency becomes automated, and the cost of rooftop solar panels continues to plummet, utilities are concerned about how these changes will affect electricity sales. More efficient industries, buildings, homes, and appliances now allow customers to accomplish much more with far less energy, and advances in telecommunications and information systems will soon create new opportunities for energy services we could not have imagined just a few years ago. The electricity sector needs to accommodate these changes, while still providing reliable, safe, and affordable electricity for all.

Climate change is also placing pressure on utilities' outdated business models. Our fleet of fossil-fueled power plants is the single largest source of carbon pollution in the U.S., and it has become increasingly evident our reliance on this centralized, polluting power system has created the potential for more extreme weather events. It is also limiting the power grid's flexibility to adjust and respond to these changing weather patterns, and places an environmental burden on our children. We need a system that is less polluting and more resilient.

Modernizing the old "formula for success"

Much of our country's antiquated power grid is at the end of its useful life and will require trillions of dollars over the next few decades to update or replace. Utilities are at a crossroads: They can either build more of the same or develop a new model that is sustainable for both the environment and the utility industry as we know it.

Now is the time to take advantage of technology advancements that are revolutionizing how we make, move, and use energy. In the same way technology and innovation transformed many industries, like telecommunications, publishing and retail, the electric utility industry must adapt to modern times and emerge with a new "formula for success." This new business model should reward utilities for performance—delivering sustainable, affordable, and efficient energy services—not just for providing infinite electricity and building more infrastructure.

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"The threats posed to the electric utility industry from disruptive forces, particularly distributed resources, have serious long-term implications for the traditional electric utility business model."

– Edison Electric Institute

What EDF is doing to help utilities get it right

The EDF Clean Energy Program is transforming the U.S. electricity system by rewriting outdated regulations, spurring energy services markets, and modernizing our century-old electric grid. This transformation involves converting the grid from a system of centralized, fossil-fuel power plants to an intelligent, efficient network that smoothly integrates vastly increasing amounts of renewable energy and energy efficiency. We are fostering a smart grid that empowers customers to lower their utility bills by expanding choices for more efficient, cleaner electricity.

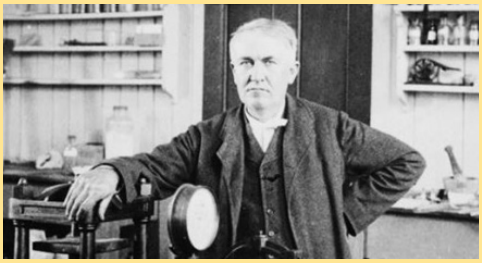
1. Spurring a paradigm shift in the electric utility industry by advocating for new utility business models and regulatory approaches that base utility earnings on performance rather than investments in new infrastructure, and aligning monopoly utility interests with clean energy services instead of simply delivering electricity.

2. Optimizing the electric grid's performance by driving investments in efficient, high-performing equipment and operations.

3. Rewarding customers for the full value of clean energy by enabling fair markets and solid economic analysis. This will support accurate price signals for energy efficiency and clean energy, as well as ensure customers have timely access to their energy usage data to make informed decisions about their energy use.

4. Unleashing the potential of private capital by introducing new financial products and standards that reduce clean energy transaction costs and help avoid the high upfront costs of energy improvements.

The fundamental design of our country's energy infrastructure hasn't changed much since Edison's time, when telephones, dishwashers, and air conditioning were the cutting-edge innovations of the century. Today, this same grid is struggling to cope with the technological advances of the last decade, a reality that hit home in the wake of Superstorm Sandy.



EDF's Utility 2.0 experts

Cheryl Roberto, JD, leads the EDF Clean Energy Program. Prior to EDF, Cheryl served as the Commissioner of the Public Utilities Commission of Ohio and Co-Chair of the 2012 National Electricity Forum.

John Finnigan, JD, is the senior regulatory attorney for EDF's US Climate and Energy Program, representing EDF before state public utility commissions on smart grid deployments and energy efficiency matters.

Diane Munns, JD, defines the strategy for EDF's clean energy collaborative efforts. Prior to EDF, Diane spent over two decades with the Iowa Utilities Board and served two terms as the President of NARUC.

Gavin Purchas is the Policy Director for the EDF's Idea Bank, an internal think tank, analytics team, and strategic planning hub. He is responsible for undertaking research into technology and policy developments and market analysis.

For more information, please contact Mica Odom, Communications Director, US Climate and Energy, modom@edf.org.

Environmental Defense Fund
257 Park Avenue South
New York, NY 10010

T 212 505 2100
F 212 505 2375
edf.org

New York, NY / Austin, TX / Bentonville, AR / Boston, MA / Boulder, CO / Raleigh, NC
Sacramento, CA / San Francisco, CA / Washington, DC / Beijing, China / La Paz, Mexico