

Who We Are

The Office of Energy Efficiency and Renewable Energy (EERE) aims to create and sustain American leadership in the transition to a global clean energy economy. It leads the EERE's efforts to develop and deliver market-driven solutions for energy-saving homes, buildings, and manufacturing; sustainable transportation; and renewable electricity generation.

Accelerating America's Transition To a Clean Energy Economy

EERE's \$2 billion portfolio spans a broad array of research, development, and demonstration activities that are unlocking a new era of sustainable solutions.

Technology and support areas include:

Energy Efficiency

- Advanced Manufacturing
- Buildings
- Federal Energy Management
- Weatherization and Intergovernmental

Renewable Power

- Geothermal
- Solar
- Wind
- Water

Sustainable Transportation

- Bioenergy
- Hydrogen and Fuel Cells
- Vehicles

Business Operations

- Project Management Coordination
- Golden Field Office
- Workforce Management
- Information Technology Services Office
- Budget

Strategic Programs

- Policy and Analysis
- Technology to Market
- International
- Stakeholder Engagement
- Communications
- Legislative Affairs
- Strategic Priorities and Impact Analysis



EERE's diverse clean energy portfolio—including this 32 megawatt solar farm collaboration on Long Island—is yielding jobs and advanced technologies that are helping America to meet its carbon reduction goals. *Source: Brookhaven National Laboratory*

What We Do

EERE is at the center of the clean energy economy, leading researchers and other partners to deliver innovative technologies that accelerate deployment of clean energy solutions. These advancements strengthen U.S. energy security, environmental quality and economic vitality. EERE's priorities include:

- ✓ **Advanced Manufacturing:** EERE aims to deploy advanced technologies to reduce the lifecycle consumption of manufactured goods by 50% over the next 10 years.
- ✓ **Biofuels:** Development of advanced biofuels has significant potential to address U.S. energy competitive advantage, transportation-related greenhouse gas emissions and U.S. job growth.
- ✓ **Grid Modernization:** EERE has undertaken an aggressive five-year strategy to modernize the national power grid through targeted cost reductions and a coordinated grid and analytics platform.
- ✓ **EV Everywhere:** EERE launched this initiative to secure American leadership in producing plug-in electric vehicles by 2022 that are as affordable for the average American family as gasoline-powered vehicles were in 2012.
- ✓ **Solar Power:** The SunShot Initiative's goal is to drive technology innovation to make solar cost-competitive with conventional energy sources before the end of the decade.
- ✓ **Wind:** EERE-funded research is helping to lower the costs and accelerate the deployment of wind energy technologies—both on land and offshore. Today's wind industry supports thousands of U.S. jobs, including workers at more than 400 manufacturing plants in 44 states.



A student carries materials to construct the Stevens Institute of Technology's first place winning entry in the 2015 Solar Decathlon, a biennial competition EERE leads to challenge college students to design, build and operate solar-powered houses.
Source: National Renewable Energy Laboratory

EERE Successes

- Since 2006, EERE investments have helped accelerate deployment of fuel cell electric vehicles and cut the cost of fuel cells by 50%. Also, research funded by DOE has reduced the costs of electric vehicle batteries by 40%.
- Through the Clean Cities program, EERE has reduced petroleum use by 1 billion gallons and prevented 7.5 million tons of greenhouse gas emissions.
- EERE initiated the Workplace Charging Challenge to partner with 500 U.S. employers by 2018 to advance the use of electric vehicles.
- The Clean Energy Manufacturing Initiative helped launch the opening of the Institute for Advanced Composites Manufacturing Innovation in Knoxville, Tennessee. This hub will connect the world to leading manufacturers across the supply chain with universities and labs to foster a clean energy manufacturing renaissance.
- Research Retrofitting by the DOE Better Buildings Residential and Home Performance program provided 25% in energy and cost savings to homeowners in 43 states.
- Better Buildings Challenge partners have cut energy waste by 94 Trillion British Thermal Units since President Obama launched the challenge in 2011. This saved \$840 million in energy costs and avoided 6 million tons of harmful carbon emissions—equivalent to reducing the emissions of 1 million cars. The Better Buildings Challenge now has more than 250 partners that are improving 3.5 billion square feet of space in 650 manufacturing plants in 50 cities and states.
- Though EERE's efforts in the past decade, the U.S. wind industry has grown to represent 31% of newly installed generating capacity, and the cost of energy from wind power has decreased from \$0.55/kWh in 1980 (current dollars) to under \$0.03/kWh in the interior region of the U.S.
- Solar represented 32% of all new recent electric generating capacity in the U.S., solar. Solar deployments have increased 40% in one year, and jobs in the solar industry have increased to 174,000 total.



EERE-funded research is helping to advance wind energy.
Source: National Renewable Energy Laboratory