

## Energy Efficiency Trends in the Electric Power Industry: Top 10 Things You Should Know

- 1 Electric company customer-funded energy efficiency (EE) programs saved 237 terawatt-hours (TWh) of electricity in 2021.<sup>1</sup>
- 2 In 2021, EE programs avoided the generation of 168 million metric tons of carbon dioxide (CO<sub>2</sub>) emissions.
- In 2021, EE programs saved enough electricity to power 33 million U.S. homes for one year.
- EE programs are very cost-effective, delivering energy savings at a cost of roughly 2.4 cents per kilowatt-hour (kWh) over the lifetime of the investment.

- 5 States with regulatory frameworks that support electric company investments in EE programs tend to lead in energy savings.
- EE savings grew 19 percent over the past 5 years, from 198 TWh saved in 2017 to 237 TWh saved in 2021.
- 7 Over the past 5 years, EE expenditures have averaged \$7.0 billion.
- 8 According to the latest data, targeted EE program expenditures totaling \$571 million helped 1 million low-income households be more energy secure.



## Energy Efficiency Programs Save Energy and Reduce Carbon Dioxide Emissions

1. For the purposes of this factsheet, the electric power industry includes investor-owned electric companies, public power utilities, electric cooperatives, and federal utilities. We use the term 'electric companies' in this report to encompass all of these industry segments.

In 2021, EE programs saved 45 percent more electricity than the amount generated by solar energy, and about two-thirds of what wind energy produced.

Comparison: EE Program Savings and Renewable Energy Generated (2021)



 Across the country, 32 states have approved fixed-cost recovery mechanisms–17 states have revenue decoupling, 13 have lost revenue adjustment mechanisms, and 2 states have both mechanisms. 28 states have performance incentives in place.



Sources:

- U.S. Energy Information Administration. Form-861: 2021. October 2022. https://www.eia.gov/electricity/data/eia861/
- Institute for Electric Innovation. Energy Efficiency Trends in the Electric Power Industry (2008-2020). October 2021.
- U.S. Environmental Protection Agency. Greenhouse Gas Equivalencies Calculator: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
- Lawrence Berkeley National Laboratory. Still the One: New Study Finds Efficiency Remains a Cost-Effective Electricity Resource. July 2021. https://emp.lbl.gov/news/stillone-new-study-finds-efficiency-remains
- ACEEE. Meeting the Challenge: A Review of Energy Efficiency Program Offerings for Low-Income Households. November 2022. https://www.aceee.org/research-report/ u2205
- U.S. Energy Information Administration: Electric Power Annual 2021. November 2022. https://www.eia.gov/electricity/annual/
- ACEEE. 2022 State Energy Efficiency Scorecard. December 2022. https://www.aceee.org/research-report/u2206

## **About the Institute for Electric Innovation**

The Institute for Electric Innovation focuses on advancing the adoption and application of new technologies that will strengthen and transform the energy grid. IEI's members are the investorowned electric companies that represent about 70 percent of the U.S. electric power industry. The membership is committed to an affordable, reliable, secure, and clean energy future.

IEI promotes the sharing of information, ideas, and experiences among regulators, policymakers, technology companies, thought leaders, and the electric power industry. IEI also identifies policies that support the business case for the adoption of cost-effective technologies.

IEI is governed by a Management Committee of electric industry Chief Executive Officers. In addition, IEI has a select group of technology companies on its Technology Partner Roundtable.



Institute for Electric Innovation 701 Pennsylvania Avenue, N.W. | Washington, D.C. 20004 Phone: 202.508.5440 | Fax: 202.508.5150 f /ElectricInnovation y @Elec\_Innovation