Quick Facts

OpenEI.org is a free and open data platform that offers an easy way to share and access energy data. It was developed to make energy data more transparent by sharing data and making it easily accessible for use in applications and analyses.

OpenEI.org is a collaborative platform that uses the power of crowdsourcing to build new datasets. It uses linked, open-data protocols to connect to and integrate data from partner sites and applications.

OpenEI.org provides U.S. utility rate data and renewable energy incentives and policy data in easy-to-understand, human-readable formats, as well as machine-readable, linked open data and application programming interfaces.

Data are added regularly to OpenEI.org, providing up-to-date information on renewable energy technologies such as wind, solar, and geothermal energy, as well as regional information that is available by country, state, and city.

OpenEI is part of the U.S. government's initiative to be transparent with data and make it more accessible to entrepreneurs and application developers. The U.S. Department of Energy and its national laboratories use OpenEI.

Energy investors can use OpenEI's data to determine how many turbines could be installed on a wind farm; learn about solar, biomass, or geothermal energy resource potential; and gain access to cost data on generation sources, fuels, and vehicles.

National Renewable Energy Laboratory
15013 Denver West Parkway, Golden, CO 80401
303-275-3000 • www.nrel.gov

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NREL Develops OpenEI.org, a Public Website Where Energy Data can be Generated, Shared, and Compared

The National Renewable Energy Laboratory (NREL) has developed OpenEI.org, a public, open, data-sharing platform where consumers, analysts, industry experts, and energy decision makers can go to boost their energy IQs, search for energy data, share data, and get access to energy applications.

The free site blends elements of social media, linked open-data practices, and MediaWiki-based technology to build a collaborative environment for creating and sharing energy data with the world. The result is a powerful platform that is helping government and industry leaders around the world define policy options, make informed investment decisions, and create new businesses.

OpenEI users have access to a wide range of data sets and tools, including robust utility rate and tariff data; information on incentives and policies; country and state-specific resources and maps; transparent costs on generation, fuels, and vehicles; and guidance on geothermal regulations. OpenEI.org also features a registry that allows application developers to post their energy-efficient tools and software, as well as a search tool that enables users to look for data on OpenEI and other related sites, such as Data.gov. The site continues to expand as NREL adds new features.

Today's consumers are looking for energy saving tips and strategies. Green Button data on electricity usage—gathered from customers' smart meters—can shed light on ways for users to reduce energy use and save money. Through OpenEI, users can upload their own Green Button data if they choose, or they can download energy use data from anonymous contributors. And OpenEI's Utility Rate Database allows users to explore time-of-use rates, demand charges, and tiered rate structures, gathering together information that is typically difficult to find.

OpenEI.org can help answer other questions from consumers. Am I paying too much for electricity? Does it make sense for me to put solar panels on my roof? Should I lease my land to wind-farm developers? OpenEI also helps entrepreneurs and energy analysts by giving them the tools they need to be successful. It helps to enhance knowledge and data access, build jobs, improve collaboration, and make an impact that will transform the energy economy.

Data applications and visualizations built on OpenEI can be used to help inform decisions, compare data, and even develop new data through crowdsourcing.

Photo by Dennis Schroeder, NREL 19433