



Northeast Regional Energy Efficiency Database (REED) 2020 data update (fiscal year 2022)

September 2023

The U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy (DOE), prepared this report. By law, our data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The views in this report do not represent those of DOE or any other federal agencies.

Northeast Regional Energy Efficiency Database (REED) 2020 data update

Electric and natural gas utilities and state energy efficiency (EE) organizations offer incentives that are an important component of evolving state and local EE policies. To understand how these incentives affect energy consumption and technology choices in buildings, we incorporate nonfederal EE incentives for a variety of end-use technologies into our [National Energy Modeling System's \(NEMS\) Residential Demand Module \(RDM\)](#) and [Commercial Demand Module \(CDM\)](#). We use NEMS to produce long-term projections of energy use within the United States.

The RDM and CDM represent consumer choice among various energy-consuming equipment in buildings, ranging from technologies that meet federal minimum EE standards to more efficient alternatives. These modules subtract incentives (equipment subsidies or rebates) from installed costs for [equipment or appliances](#) that meet or exceed ENERGY STAR® specifications in their respective technology choice menus. This approach lowers the relative cost of high-efficiency equipment.

To enhance our representation of state and utility EE programs in NEMS, we contracted with the Northeast Energy Efficiency Partnerships (NEEP) to characterize these programs in the Northeast in fiscal year 2022. As part of this contract, NEEP updated its Regional Energy Efficiency Database (REED) to include 2020 incentive data for the District of Columbia and nine states in the New England, Middle Atlantic, and South Atlantic Census Divisions. REED provides information on several metrics, including:

- Annual and lifetime energy savings
- Peak demand savings
- Program expenditures
- The cost of saved energy
- Program funding sources

REED incentive data are available to the public by request on NEEP's [REED website](#). As part of this contract, NEEP also updated the [Supporting Information](#) report. The report complements the complete REED data set, detailing information about each state that is characterized in the REED database, which now includes 2020 data about energy efficiency programs in Delaware and Pennsylvania. The report also provides details about program administrators, reporting procedures, and evaluation, measurement, and verification practices. It also provides information about NEEP's energy savings assumptions.

NEEP also developed a video that demonstrates how to use REED data to analyze the cost effectiveness of energy efficiency programs. In addition, NEEP used the newly added 2020 data as well as historical REED data to identify and discuss trends in energy efficiency as part of the [Regional Energy Data Dive](#) blog series.

You can cite the contract report as a report by the Northeast Energy Efficiency Partnerships (NEEP) prepared for the U.S. Energy Information Administration (EIA).

Appendix



To: U.S. Energy Information Administration (EIA)
Courtney Sourmehi
Erin Boedecker

From: Northeast Energy Efficiency Partnerships (NEEP)
Erin Cosgrove
Aditi Dalal

Date: August 4, 2023

Re: NEEP REED Project—Final Report

Introduction

The following is a final report for work completed for the August 2022 to August 2023 [Regional Energy Efficiency Database \(REED\)](#) project for the U.S. Energy Information Administration (EIA) under Order Number 89303021PEI000086.

REED Program Year 2020 Data Collection

State Data Collection

To obtain 2020 data, NEEP reached out to the following 11 states and the District of Columbia. In the process, we found that many states have 2021 data available, and we collected that data where possible. States where we were able to collect 2021 natural gas and electric data are in **bold**, and states that have 2021 electric data have an asterisk (*).

- **Connecticut**
- **Delaware**
- District of Columbia
- New Hampshire*
- New Jersey
- New York
- Maine*
- **Maryland**
- **Massachusetts**
- **Rhode Island**
- Pennsylvania*
- **Vermont**

NEEP received electric energy efficiency data for the New England states (Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, and Connecticut) from the Independent System Operator-New England (ISO-NE) because ISO-NE collects annual program data to inform its annual [Energy Efficiency Forecast](#). This year was the first year that NEEP requested and received data from Delaware. In the past, NEEP had manually collected data



from Delaware; however, this year we re-established a connection with a state contact who provided us with Delaware's data.

NEEP collected data for these states from the links below:

- **Massachusetts**, natural gas programs: [Massachusetts Energy Efficiency Advisory Council \(MA EEAC\) plans and updates web page](#) (to gather 2021 data)
- **New York**, electric and natural gas programs: [Open New York](#) and [New York State Clean Energy Dashboard](#)
- **Maine**, natural gas programs: [Efficiency Maine Annual Reports](#)
- **Maryland**, electric and natural gas programs: annual program administrator reports available at [Maryland Public Service Commission: Case Number 9494](#) (2020) and [Maryland Public Service Commission: Case Number 9648](#) (2021)
- **Pennsylvania**, electric programs: annual electric program administrator reports [available on the Act 129 website](#)

NEEP collected data from all the jurisdictions in the REED region this year. In past years, NEEP was unable to get data from Delaware and Pennsylvania, but this year is the first year that both of these states are included. For Pennsylvania, we were able to find the data through reviewing energy efficiency proceedings and dockets in the state and pulling information from yearly and final reports submitted by the utilities. For Delaware, we re-established a state contact who gathered the data for us.

Master REED Data Workbook

The Master REED Data Workbook includes all REED data collected since 2011. We made the 2020 Master Workbook available by request in March 2023. We announced the availability of the program year 2020 REED data in our April blog post, [How Energy Efficiency Programs Performed](#). We included additional information about the Workbook in our NEEP Notes and sent emails to stakeholders that had previously requested the data.

REED Supporting Information Report

We updated the [REED Supporting Information](#) report, which complements data collected for REED and helps ensure informational transparency. The update process included adding links to supporting information that is relevant to the new 2020 data for each state and checking all links included in the last edition of the report. The NEEP REED website provides a direct link to the *REED Supporting Information* report. In addition, we send the *REED Supporting Information* in response to any requests for REED data.

The energy efficiency program metrics in REED are reported differently across the participating states and the District of Columbia. The *REED Supporting Information* report highlights some of these differences to ensure REED data sets are not misconstrued or misrepresented. The state sections include the following information:

- Program administrators
- Reporting or evaluation, measurement, and verification practices
- Key plans, reports, and savings assumptions



- Evaluation processes

Regional Energy Data Dives

In October 2022, NEEP launched a new blog series called *Regional Energy Data Dives*, which is a rebranding of the *REED Rendering* blog series that ran from 2015 to 2020 and focused on energy efficiency program trends based primarily on REED data analysis.¹ The new *Regional Energy Data Dives* blog uses the REED data as a foundation for deeper analyses and incorporates new, additional data sources to get a better picture of the quickly changing energy policy and data environment. NEEP has published three blogs and one vlog (video blog) this contract cycle:

1. [Energy Efficiency Can Drive Energy Costs Down](#) in November 2022
2. [A First Look at 2020 REED Data](#) in February 2023
3. [How Energy Efficiency Programs Performed](#) in April 2023
4. [2020 Cost-Effective Program Analysis](#) in July 2023

REED Data Requests

NEEP received eight data requests between August 2022 and August 2023. We sent all requestors the most recent Master REED Data Workbook update (published in March). In the past, requests for REED data have come from a wide variety of user types, including students, industry professionals and researchers, program administrators, and government agencies. The requests so far have come from utility companies, professors at universities, and researchers interested in energy efficiency, among others.

¹ This report represents the opinions of the author. It is not meant to represent the position or opinions of the U.S. Energy Information Administration or the official position of any staff members.