

Battery Storage in New England

A Brief Overview

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December 7, 2023





Celebrating 20 Years of State Leadership



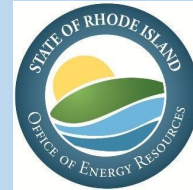
The Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy.

CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

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Energy Storage Technology Advancement Partnership (ESTAP)

Conducted under contract with Sandia National Laboratories, with funding from US DOE Office of Electricity.

- Facilitate public/private partnerships to support joint federal/state energy storage demonstration project deployment

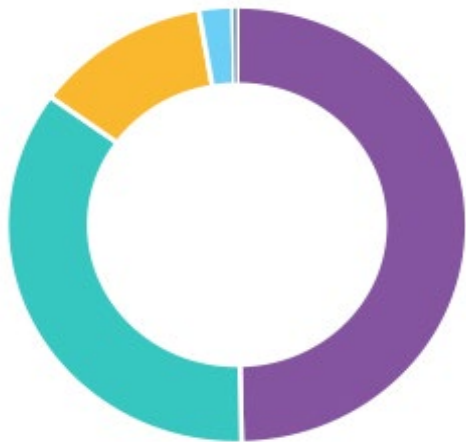
- Support state energy storage efforts with technical, policy and program assistance

- Disseminate information to stakeholders through webinars, reports, case studies and conference presentations



Regional Overview

ISO-NE Interconnection Queue (January 2023) by type



50% Wind (15,818 MW)

35% Battery Storage (11,237 MW)

12% Solar (3,939 MW)

3% Natural Gas (762 MW)

<1% Other (64 MW Hydro, 20 MW Fuel Cell)

- Energy storage ranks second in the ISO New England Interconnection Request Queue
- Two existing, large-scale pumped-hydro facilities supply almost 2,000 MW of storage capacity in New England
- About 173 MW of grid-scale battery-storage projects have come online since 2019 (does not include BTM storage)
- More than 11,000 MW of grid-scale stand-alone battery projects were in the queue as of January 2023 (does not include BTM storage or storage paired with wind or solar)
- More than 710 MW of new plus existing battery storage was secured in Forward Capacity Auction 16, for 2025–2026.

State by State – Policy Goals

Connecticut

- 100% carbon-free electricity by 2040
- RPS 48% renewable energy by 2030
- **Energy storage: 1,000 MW by 2030**

Maine

- 100% clean energy by 2050
- **Energy storage: 400 megawatts by 2030**

Massachusetts

- Net-zero greenhouse gas emissions by 2050
- RPS Class I (New Resources) 40% by 2030 and an additional 1% each year thereafter, with sub-targets for solar and offshore wind
- Clean Peak Energy Standard: 46.5% by 2050
- **Energy storage: 1,000 MWh by 2025**



New Hampshire

- RPS 25.2% by 2025

Rhode Island

- 100% renewable energy electricity by 2033

Vermont

- RES Tier 1 75% by 2032

State by State – Energy Storage Policy and Programs

Each state has three public utility commissioners. All are appointed.

Connecticut

- Storage procurement target
- Energy Storage Solutions (distributed storage installation and performance incentive)
- ConnectedSolutions customer storage performance incentive (through efficiency plan)
- Microgrid grant program

Maine

- Storage procurement target
- Energy Storage System BTM incentive (through efficiency plan)
- Utility-scale storage procurement in development

Massachusetts

- Storage procurement target
- CCERI and ACES grant programs
- SMART solar incentive storage adder and storage requirement for large solar

Massachusetts (continued)

- ConnectedSolutions (through efficiency plan)
- Clean Peak Energy Standard

New Hampshire

- Liberty Utilities residential storage pilot (to be expanded)
- ConnectedSolutions (through NH Clean Energy Fund)

Rhode Island

- ConnectedSolutions (through efficiency plan)

Vermont

- Storage eligible for RES Tier 3
- GMP BYOD and Tesla residential storage programs
- Demonstration projects

State by State – Installed Capacity

May not include all behind-the-meter storage

Connecticut

- 2.4 MWh BTM
(no utility scale)



Maine

- ~50 MW

Massachusetts

- ~330 MWh



New Hampshire

- ~7.5 MW

Rhode Island

- ~3 MW

Vermont

- ~53 MW / 150 MWh
(about ½ is residential batteries)



Thank You!



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www.cesa.org/ESTAP

Questions?

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