NCEL Fact Sheet

# ENERGY STORAGE

CLIMATE & ENERGY

## Overview

By capturing and storing energy for later use, energy storage addresses fluctuations in demand and supports a consistent renewable energy supply, allowing solar and wind power to be utilized long after generation. As extreme weather events become more frequent, energy storage helps meet increased demand and lowers costs for ratepayers by adding capacity and reducing operating expenses. It also meets the demands of a just transition by creating steady jobs across sectors.

## Policy Options

- **Connecticut S.B. 952 (Enacted 2021):** Sets energy storage targets of 300 megawatts by 2024, 650 megawatts by 2027, and 1,000 megawatts by 2030 and requires the development of programs to incentivize energy storage for various customer segments and grid systems, aiming to benefit ratepayers and support the state's energy storage industry.
- **Maine L.D. 528 (Enacted 2021):** Sets goals for developing 300 megawatts of energy storage by 2025 and 400 megawatts by 2030 along with programs and studies to support energy storage.
- **Michigan S.B. 271 (Enacted 2023):** Mandates a statewide energy storage target of 2,500 megawatts by 2029, supports greenhouse gas emission-free systems, establishes a clean energy standard, renewable energy credits, and structured processes for compliance.
- **Maryland H.B. 910 (Enacted 2023):** Requires the Public Service Commission to set energy storage deployment targets of 750 megawatts by 2027, 1,500 megawatts by 2030, and 3,000 megawatts by 2033, and establish a state energy storage program by July 2025, including various incentives and procurement mechanisms.
- **Rhode Island SB 2499/HB 7811 (Enacted 2024):** Sets clean energy storage targets of 90 MW by 2026, 195 MW by 2028, and 600 MW by 2033, empowers the Public Utilities Commission to manage storage tariffs and procurements, and directs the Infrastructure Bank to fund the transition through grants and loans.

## KEY POINTS

- As of 2022, there were approximately 8 gigawatts (GW) of operational utility-scale battery storage, and that number is expected to increase by a further 20.8 GW by 2025.
- Energy storage can reduce the cost of electricity by storing energy when it is cheapest and dispatching it when it is most expensive.


## Other Resources

- **NCEL:** Policy Update: Rhode Island Passes Landmark Legislation for Clean Energy Goals
- **NCEL:** Microgrids and Virtual Power Plants Issue Brief
- **US EPA:** Energy Storage
- **MIT:** The Future of Energy Storage
- **NREL:** Energy Storage Research
- **Utility Dive:** How Energy Storage Works

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