

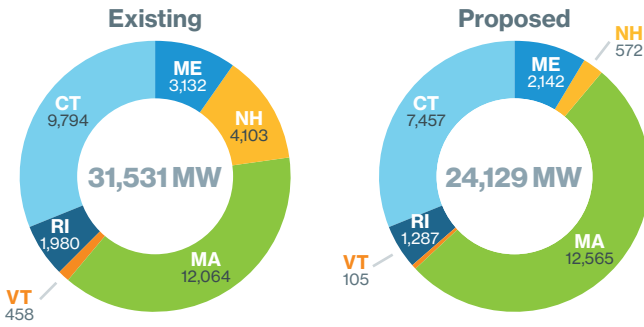
New England Power Grid State Profiles 2020–2021

Supply and demand resources help meet New England’s electricity needs, and state policies are transforming the resource mix.



Region Has Many Proposals for New Supply

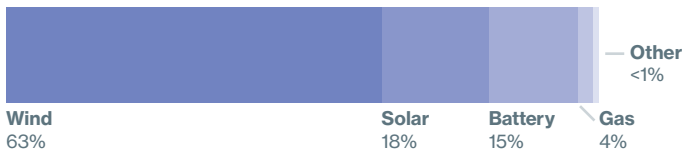
Electric generating capacity by state (MW)



Source: ISO-NE 2020 Capacity, Energy, Loads, and Transmission Report; and ISO-NE Generator Interconnection Queue, January 2021

Proposed Generation (by type)

Wind, solar and battery storage dominate new resource proposals in the ISO queue (as of January 2021); Total: 24,100 MW



Related Developments

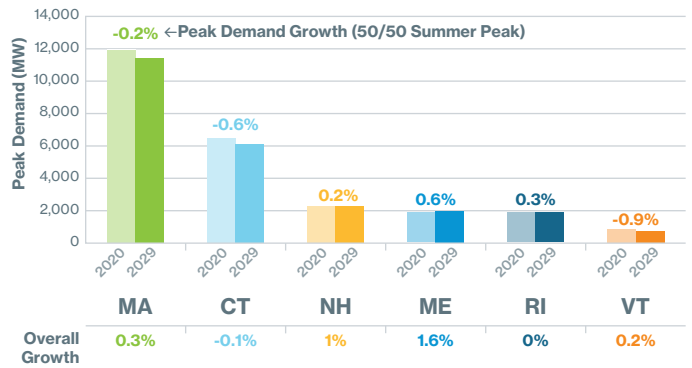
The region’s capacity market is attracting investment
More than 12,000 MW of natural gas, wind, solar, energy storage, and hydro resources have cleared in recent Forward Capacity Auctions with commitments to be available in 2021–2024.

The states are active in procuring clean energy
From 2015 to 2021, the southern New England states have solicited approx. 7,000 MW of supply through large-scale clean energy procurements, consisting primarily of wind, solar, hydro, and nuclear energy resources. This is driving proposals in the ISO queue.

Generator retirements create opportunities for new resources
Almost 7,000 MW of generating capacity (primarily coal, oil, and nuclear) have retired or announced plans to retire since 2013, and more retirements are likely.

Electricity Demand Growth Has Slowed in New England

Compound annual growth rates for peak demand and overall electricity use, net of energy efficiency and solar photovoltaics (PV), 2019–2028



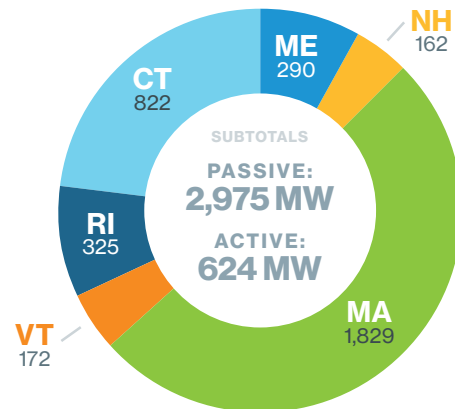
Source: ISO-NE 2020 Capacity, Energy, Loads, and Transmission Report; and 2020 Energy Efficiency Forecast



EE and solar PV are reducing demand growth
State-sponsored energy-efficiency and behind-the-meter solar PV resources are slowing the growth rate for summer peak demand and flattening overall electricity demand in New England. Electrification of transportation and buildings is forecast to add to demand.

Demand Resources Compete in New England Markets

Demand resources cleared in the 11th Forward Capacity Auction and committed for June 1, 2021, to May 31, 2022 (MW)



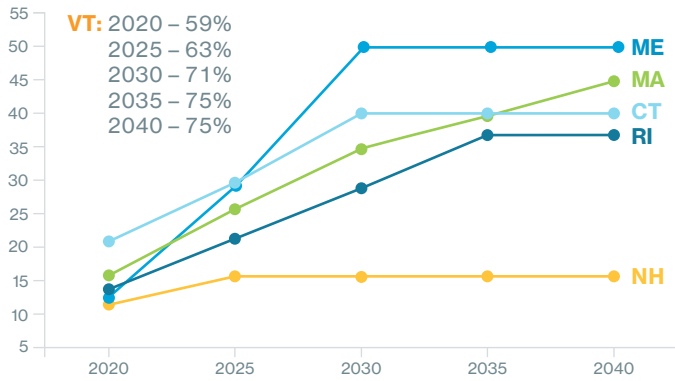
Source: ISO-NE 2021-2022 Capacity Commitment Period Forward Capacity Auction Obligations



New England is expanding market opportunities
Effective June 1, 2018, demand resources have further opportunities to participate in the wholesale electricity markets.

State Renewable Portfolio Standards Are Rising

Class I or new renewable energy resources (%)



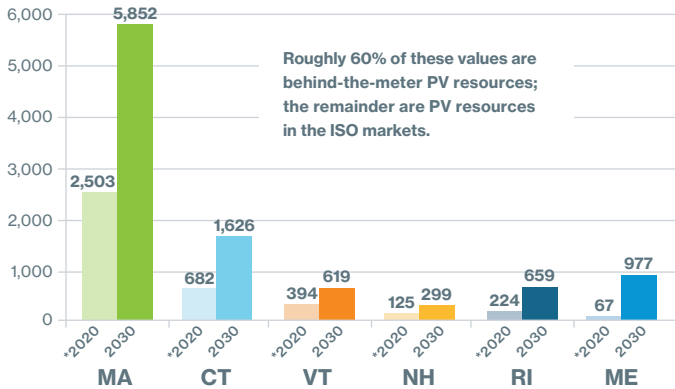
All six New England states have renewable energy standards

Electricity suppliers are required to provide customers with increasing percentages of renewable energy to meet state requirements.

*Vermont's standard recognizes new and existing renewable energy and is unique in classifying large-scale hydropower as renewable.

ISO-NE Forecasts Strong Growth of Solar PV Resources

Values are alternating current (AC) nameplate capacity (MW)



Source: Draft 2021 PV Forecast, ISO-NE, February 2021
 *As of December 2020



New England states promote behind-the-meter solar PV

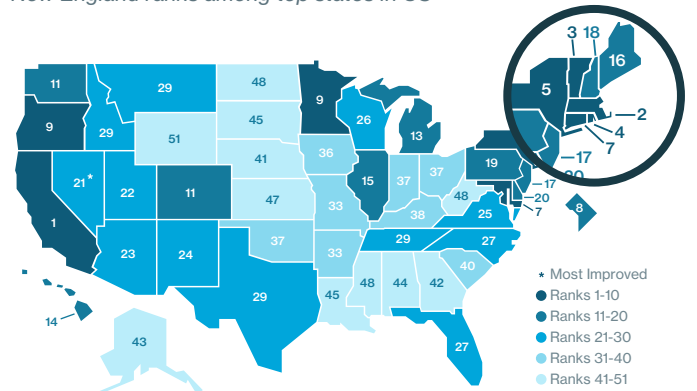
ISO-NE reduces the level of capacity to be procured in the Forward Capacity Auction to account for state policies promoting behind-the-meter solar PV.

States Target Increases in Renewable and Clean Energy and Deep Reductions in CO₂ Emissions

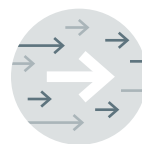
≥80% by 2050	Five states mandate greenhouse gas reductions economy wide: MA, CT, ME, RI, and VT (mostly below 1990 levels)
80% by 2050 Net-Zero by 2050	MA statewide GHG emissions limit MA clean energy standard
90% by 2050	VT renewable energy requirement
100% by 2050 Carbon-Neutral by 2045	ME renewable energy requirement ME emissions goal
100% by 2040	CT zero-carbon electricity goal
100% by 2030	RI renewable energy goal

New England States Lead US Energy-Efficiency Rankings

New England ranks among top states in US



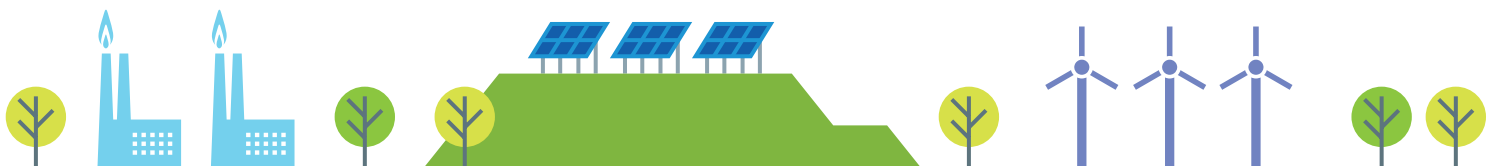
Source: American Council for an Energy-Efficient Economy, 2020 State Energy Efficiency Scorecard



New England states invest billions in energy efficiency

The six states invested \$5.3 billion from 2012 to 2017, and the ISO projects an additional \$10.7 billion investment from 2021 to 2029.

FEBRUARY 2021



About ISO New England

Created in 1997, ISO New England is the independent, not-for-profit corporation responsible for the reliable operation of New England's electric power generation and transmission system, overseeing and ensuring the fair administration of the region's wholesale electricity markets, and managing comprehensive regional electric power planning.