

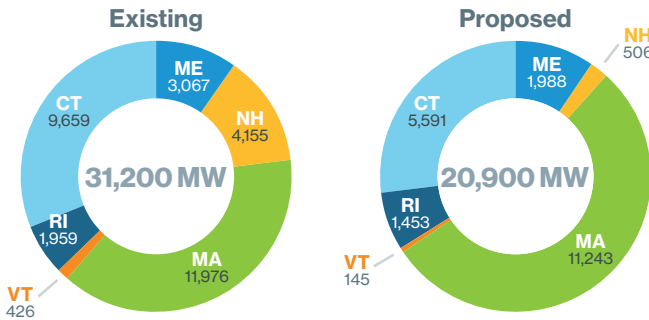
New England Power Grid State Profiles 2019–2020

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 2019 Capacity, Energy, Loads, and Transmission Report; and ISO-NE Generator Interconnection Queue, January 2020

Proposed Generation (by type)

Wind, solar and battery storage dominate new resource proposals in the ISO queue (as of January 2020); Total: 20,900 MW



Related Developments



The region's capacity market is attracting investment

More than 3,000 MW of natural gas, wind, solar, and hydro resources have cleared in recent Forward Capacity Auctions with commitments to be available in 2020–2023.



The states are active in procuring clean energy

From 2015 to 2019, 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.

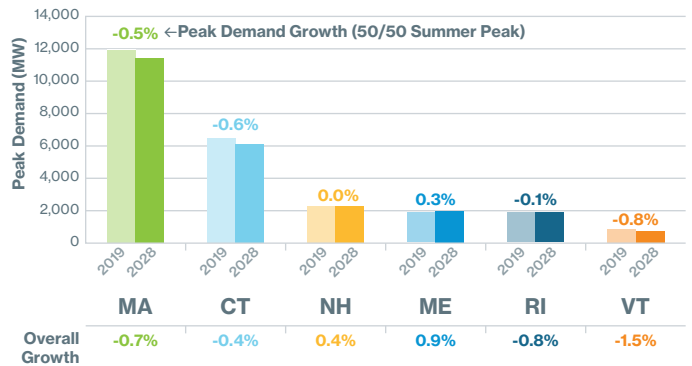


Generator retirements create opportunities for new resources

More than 6,800 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 2019 Capacity, Energy, Loads, and Transmission Report; and 2019 Energy Efficiency Forecast

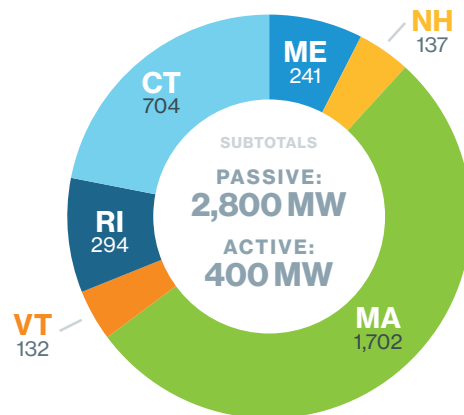


EE and solar PV are reducing demand growth

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 for the 7.2 million retail electricity customers in New England.

Demand Resources Compete in New England Markets

Demand resources cleared in the 11th Forward Capacity Auction and committed for June 1, 2020, to May 31, 2021 (MW)



Source: ISO-NE 2020-2021 Capacity Commitment Period Forward Capacity Auction Obligations

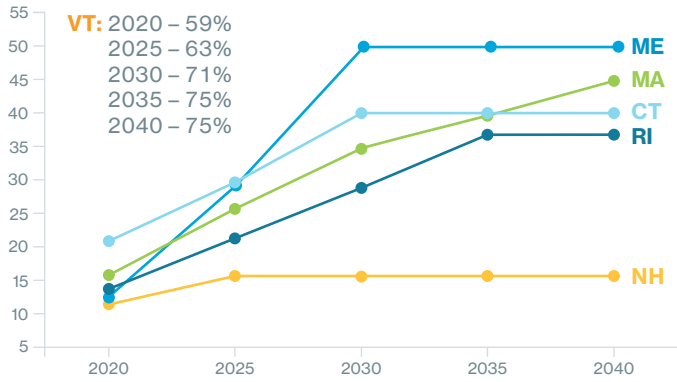


New England is expanding market opportunities

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 (%)



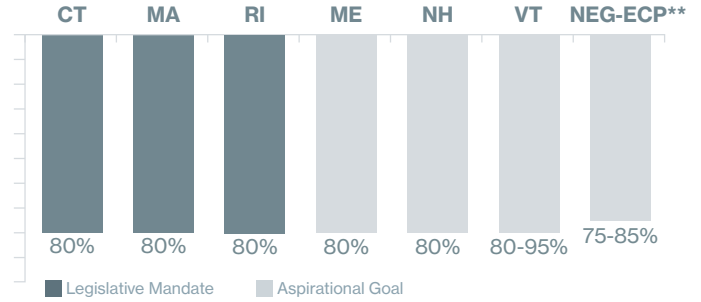
All six New England states have renewable energy standards

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.

State Goals Seek Deep Reductions in CO₂ Emissions

Percentage reduction in greenhouse gas (GHG) emissions below 1990 levels by 2050*



*Some states have different baseline and target years

**New England Governors and Eastern Canadian Premiers (NEG-ECP)

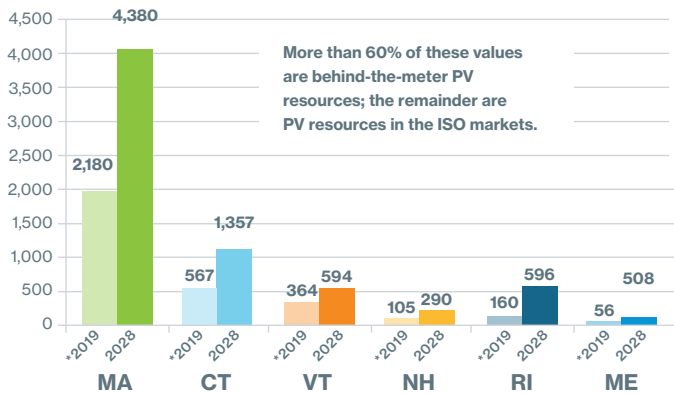


States pursue multiple approaches to reduce GHG emissions

New England states are promoting GHG reductions on a state-by-state basis and at the regional level, through a combination of legislative mandates (e.g., CT, MA, ME, RI) and aspirational goals (e.g., NH, VT, and NEG-ECP).

ISO-NE Forecasts Strong Growth of Solar PV Resources

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



Source: Draft 2020 PV Forecast, ISO-NE, February 2020
*As of December 2019

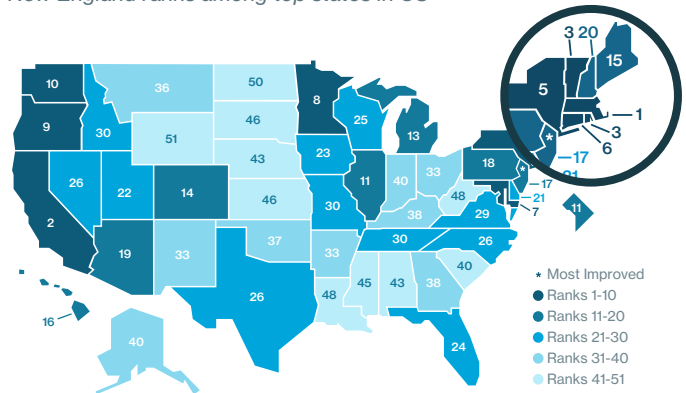


New England states promote behind-the-meter solar PV

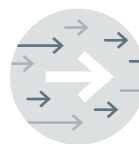
ISO-NE reduces the level of capacity to be procured in the Forward Capacity Auction to account for state policies promoting behind-the-meter solar PV.

New England States Lead US Energy-Efficiency Rankings

New England ranks among top states in US



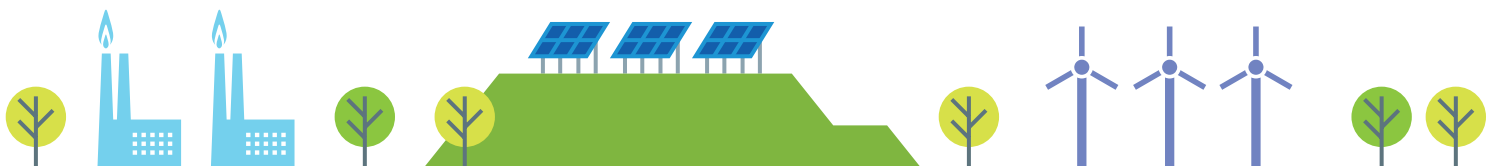
Source: American Council for an Energy-Efficient Economy, 2019 State Energy Efficiency Scorecard



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 \$10.6 billion investment from 2020 to 2028.

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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.