

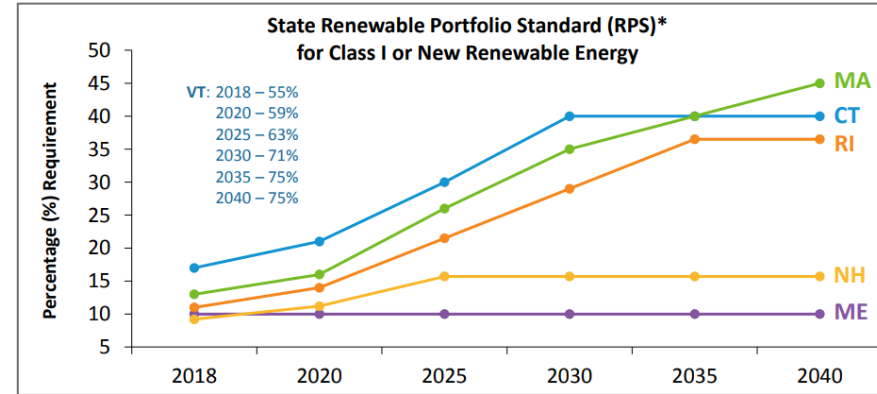
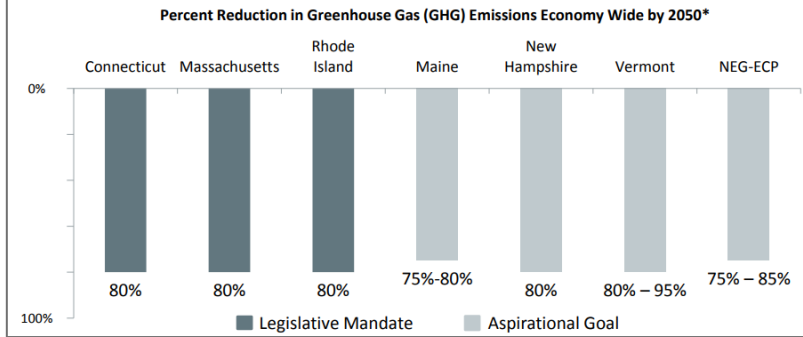


New England Clean Energy Connect

July 31, 2022

New England De-Carbonization Goals

States Have Set Goals for Reductions in Greenhouse Gas Emissions: *Some Mandated, Some Aspirational*



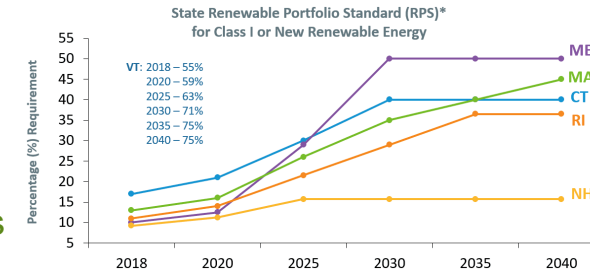
State(s)	State Procurement Initiatives for Large-Scale Clean Energy Resources	Resources Eligible/Procured	Target MW (nameplate)
MA, CT, RI	2015 Multi-State Clean Energy RFP	Solar, Wind	390 MW
MA	2017 Section 83D Clean Energy RFP	Hydro Import	Approx. 1,200 MW (9,554,000 MWh)
MA, RI	2017 Section 83C Offshore Wind RFP	Offshore Wind	1,600 MW (MA) 400 MW (RI)
CT	2018 Renewable Energy RFP	Offshore Wind, Fuel Cells, Anaerobic Digestion	254 MW
CT	2018 Zero-Carbon Resources RFP	Nuclear, Hydro, Class I Renewables, Energy Storage	Approx. 1,400 MW (12,000,000 MWh)
RI	2018 Renewable Energy RFP	Solar, Wind, Biomass, Small Hydro, Fuel Cells and Other Eligible Resources	400 MW



Development Background

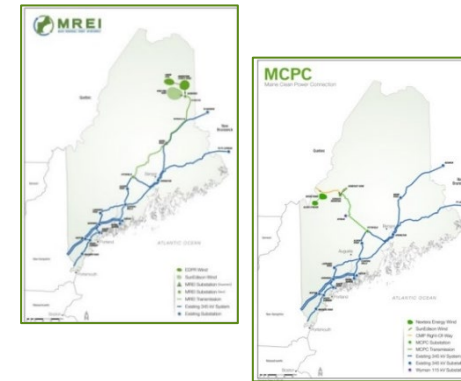
New England Landscape for Renewable Development

- Ambitious RPS targets set by New England states
- Abundant wind and solar resources in Maine and hydro energy in Canada
- Ongoing onshore and offshore renewable energy procurements (RFPs)



AVANGRID Initiatives

- Strategic Right of Ways to unlock renewable resources – started acquisition of **Western Maine corridor** in 2014
- Responded to several regional RFPs with transmission solutions to integrate renewable resources



New England Clean Energy Connect (NECEC)

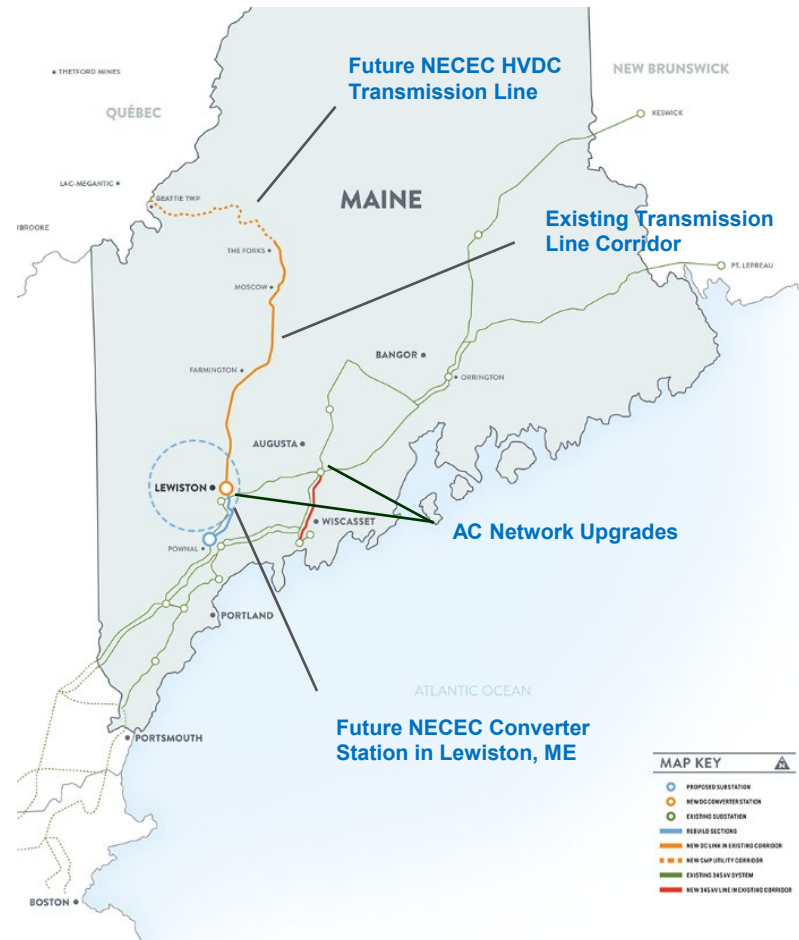
- Presented as a joint development with Hydro Quebec in 2017
- Brings 1,200 MW of hydro energy from Quebec to the New England grid (9.45 TWh/year)
- Awarded in the Massachusetts RFP in 2018
- Secured key approvals in 2019 and 2020



Project Scope

Develop, construct, own and operate the new transmission facilities required in the US to enable the interconnection of 1200 MW of hydro energy from Quebec.

- New overhead 145-mile +/- 320 kV DC transmission
 - 53 miles on new corridor, including a <1 mile underground section at Kennebec river
 - 92 miles co-located with existing transmission
- HVDC converter station at Merrill Road (near Larrabee Road Substation)
- New 1.2 mile 345kV AC Transmission Line from the new Merrill Road Converter Substation to the existing Larrabee Road Substation
- AC transmission network upgrades to permit interconnection into ISO-New England system
- Coordination with Hydro Quebec for facilities in Canada



Project Benefits

Market and Environmental Benefits

- Lower future electricity costs (\$14 - 44 million/yr.)
- Lower future natural gas costs and consumption
- Generation resource replacement and diversification
- Reduce regional CO₂ emissions from electricity generation by 3.0 - 3.6 million metric tons annually.
- \$573M Growth in employment and Maine's Gross Domestic Product (GDP) spurred by lower energy costs for business and consumers (\$25 - 29M/yr.)

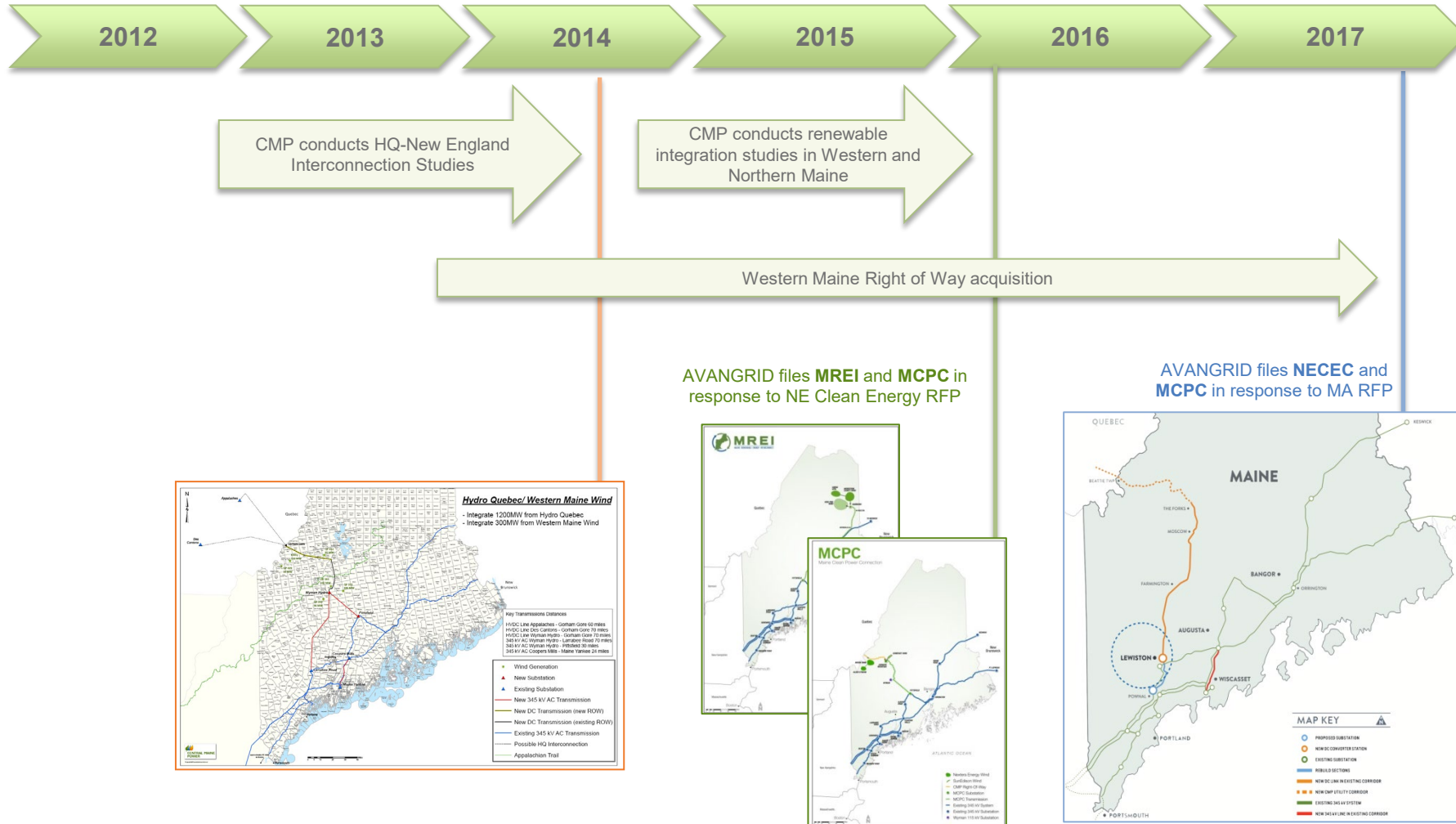
Project Development Benefits

- Increased direct, indirect, and induced local employment (1,600/yr. avg.)
- Increased local property taxes (\$18 million in host communities)
- Expanded fiber optic access in rural areas
- Expanded snowmobile and recreational trail opportunities (53 miles)
- \$200M in Transmission Network Upgrades
- 40,000 acres in conservation land

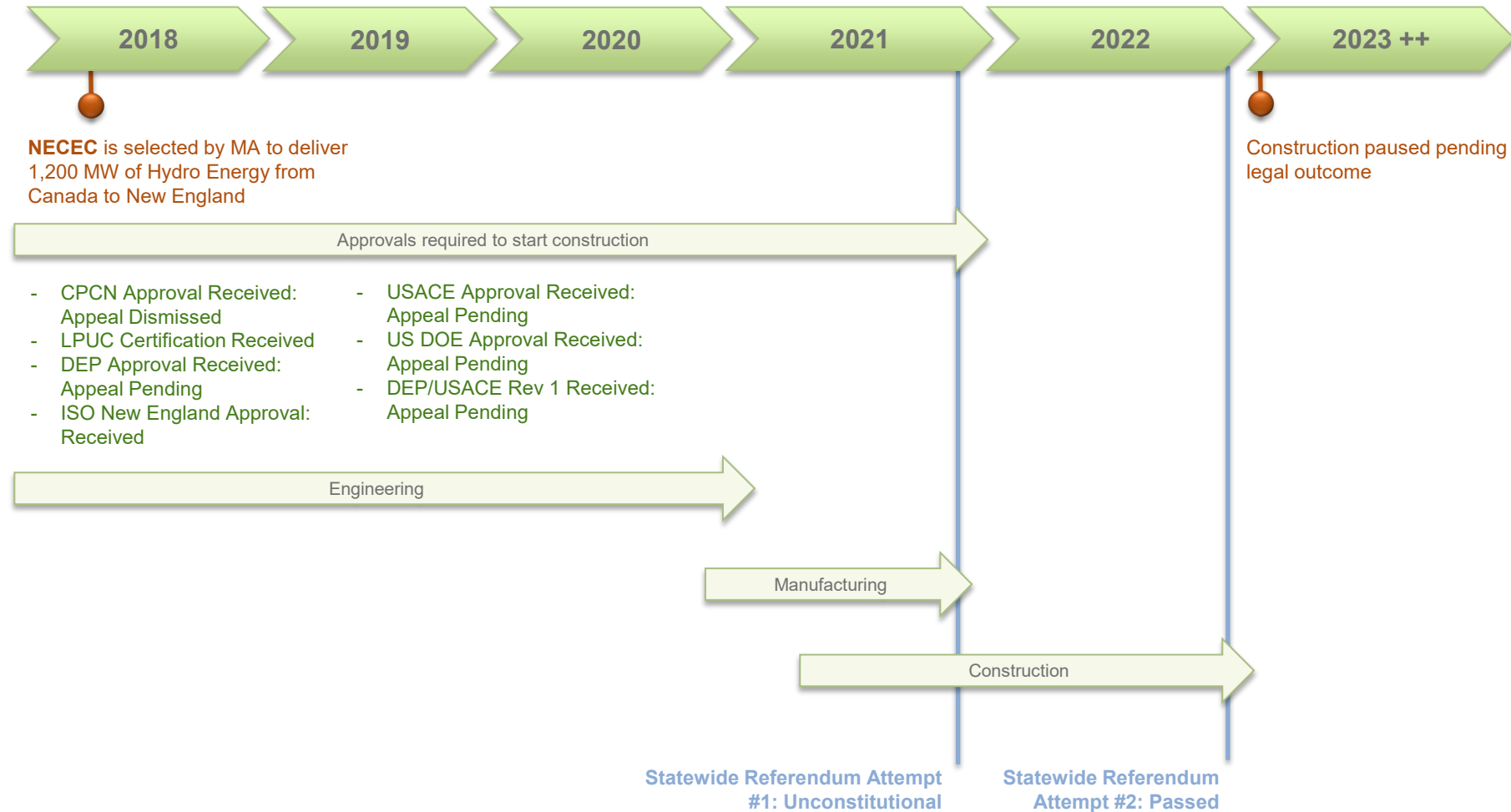
Maine Community Benefits & Settlement Agreements (\$257M total)

- \$140M Consumer Rate Relief
- \$50M Low-Income consumer rate relief
- \$15M Fiber Optic and Broadband Expansion
- \$5.5M Western Mountains and Rivers
- \$5M Franklin County Host Community Fund
- \$5M Education Funding, Franklin and Somerset Counties
- \$15.05M Electric Vehicle infrastructure
- \$15M Heat Pump Support
- \$2.5M Decarbonization Planning Studies
- \$1M University of Maine Wind Technology

NECEC history: Right of Way acquisition and Bid in Response to MA RFP



NECEC history: Road to Commercial Operation



Permitting and Construction Challenges

Other Major Challenges

- 2019 Legislature
 - Major lobbying by project opponents
- 2020 Legislature
 - Major lobbying by project opponents
- 2020 Statewide Referendum
 - Financially supported by AVANGRID and HydroQuebec; Financially opposed by NextEra, Vistra Energy, and Calpine Corporation
 - Ruled unconstitutional by Maine Supreme Judicial Court
- BPL Lease Appeal
- 2021 Legislature
 - Major lobbying by project opponents
- 2021 Referendum
 - Passed, legal proceeding underway
 - NextEra Energy, Vistra Energy, Calpine Corporation spent a combined \$25m+
 - AVANGRID and HydroQuebec spent a combined \$40m+
- Dispute with NextEra before FERC regarding Seabrook Nuclear Power Plant breaker

Impacts to Development

- COD adjusted from EOY 2022 to Dec 2024
- Forced adjustments to construction sequencing
- Cost overruns
- Workforce uncertainty
- Impact to regional climate goals