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ISO-New England Consumer Liaison Group (CLG) Energy Efficiency Panel

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CIC Providence

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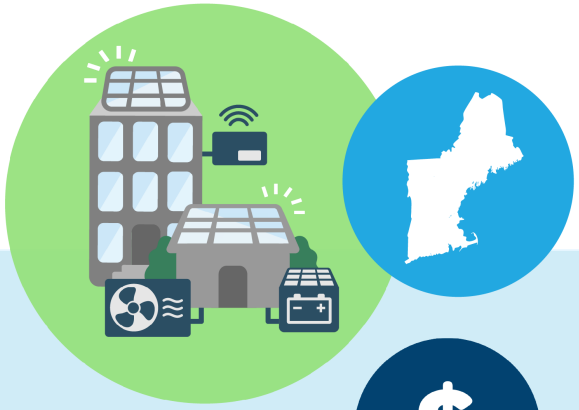

Benefits of Energy Efficiency Programs in New England: 2012-2023

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WHAT THE REGION ACHIEVED:

$55.1 BILLION
IN TOTAL
LIFETIME BENEFITS

$3.43 IN LIFETIME BENEFITS
FOR EVERY $1 INVESTED
IN ENERGY EFFICIENCY

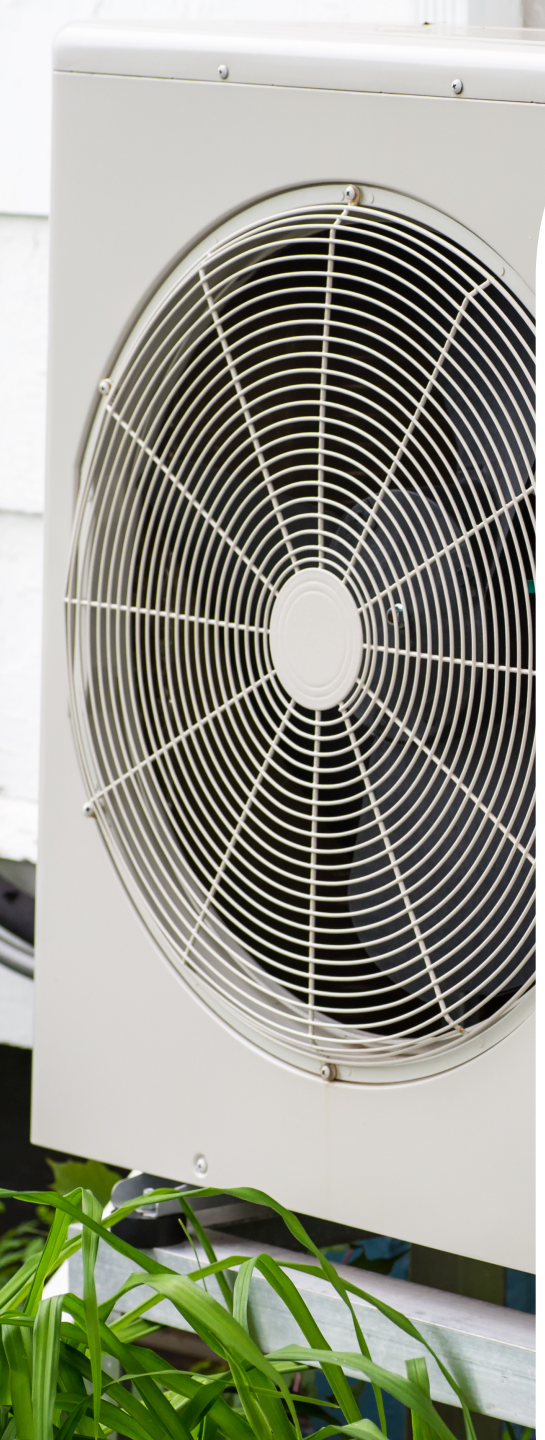
161,418 JOBS
IN ENERGY EFFICIENCY
INDUSTRIES IN 2023

CUMULATIVE LIFETIME SAVINGS ARE EQUIVALENT TO:

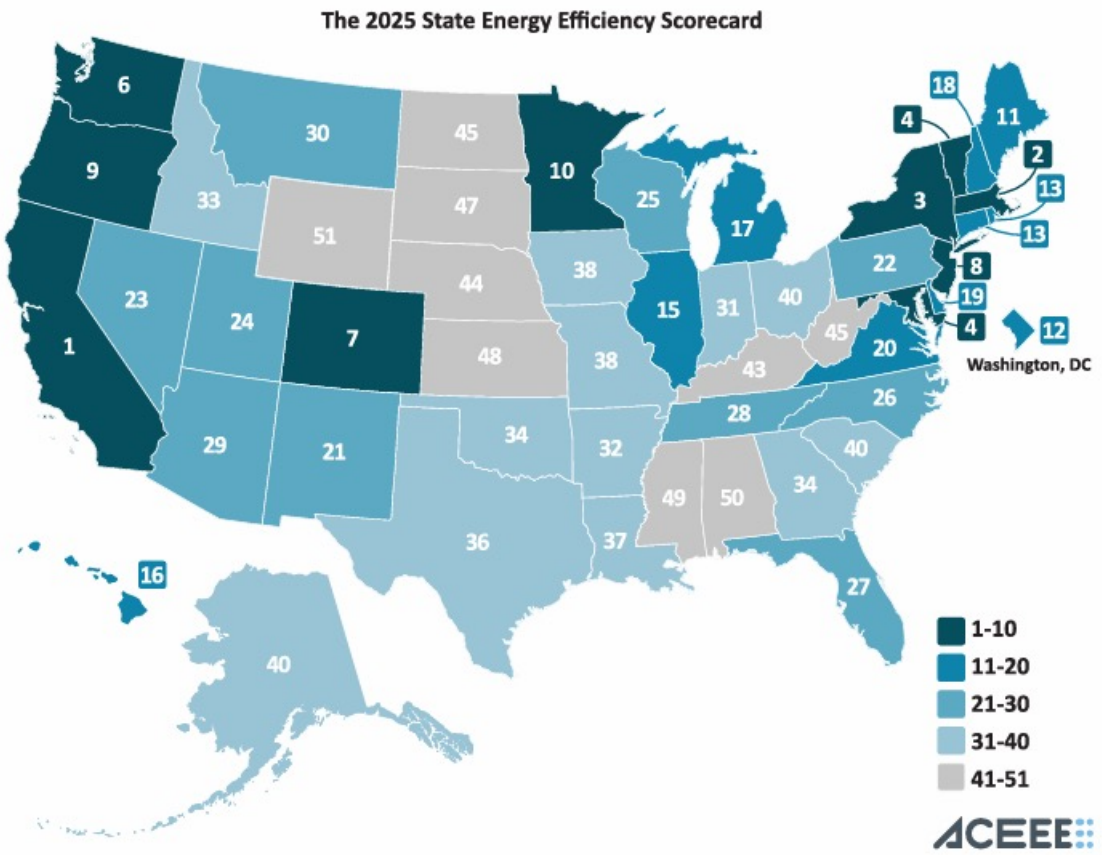
166.2 YEARS
OF ELECTRICITY GENERATION
FROM MYSTIC GENERATING STATION

10,402,000 HOMES
USING NATURAL GAS FOR ONE YEAR
IN NEW ENGLAND

CO_2 FROM 32,917,000 GAS CARS
DRIVEN FOR ONE YEAR
IN NEW ENGLAND



Updated ACEEE State Rankings for 2025



Rank	State	Total score (100 pts.)	Change in rank from 2022
1	California	93.5	0
2	Massachusetts	81	0
3	New York	79.5	0
4	Maryland	77	3
4	Vermont	77	0
6	Washington	75	5
7	Colorado	73	6
8	New Jersey	72.5	6
9	Oregon	71.5	2
10	Minnesota	70	0
11	Maine	69.5	–6
12	District of Columbia	66.5	–6
13	Connecticut	65.5	–4
13	Rhode Island	65.5	–6
15	Illinois	57	1
16	Hawaii	56.5	1
17	Michigan	54	–2
18	New Hampshire	50	1

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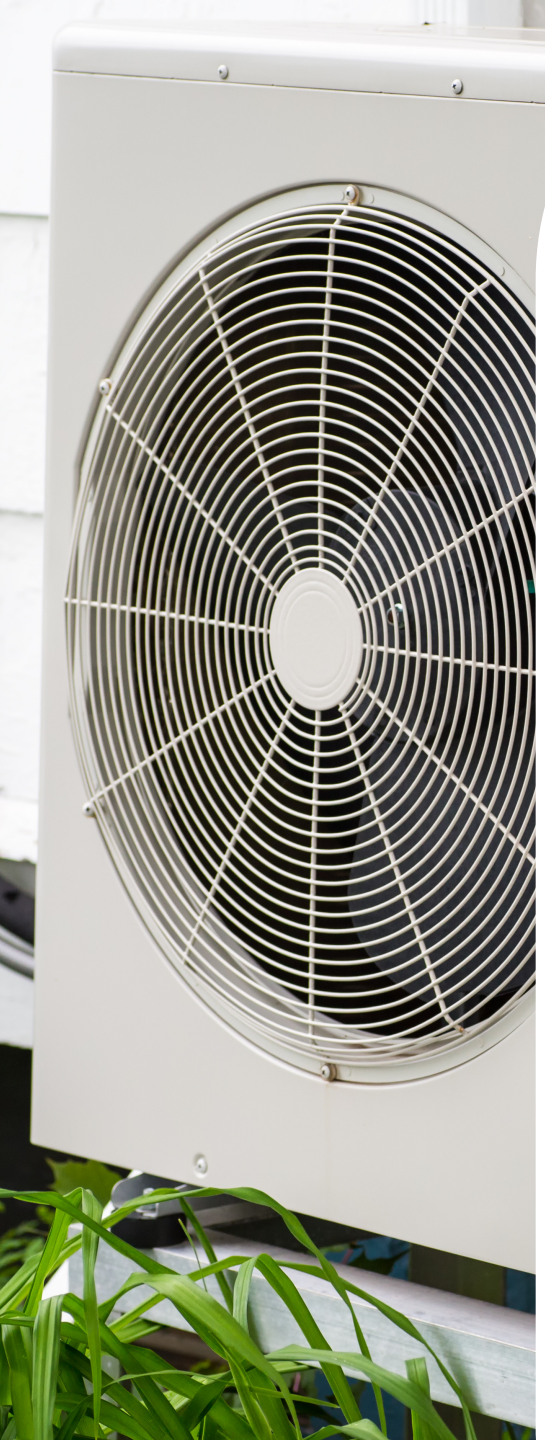
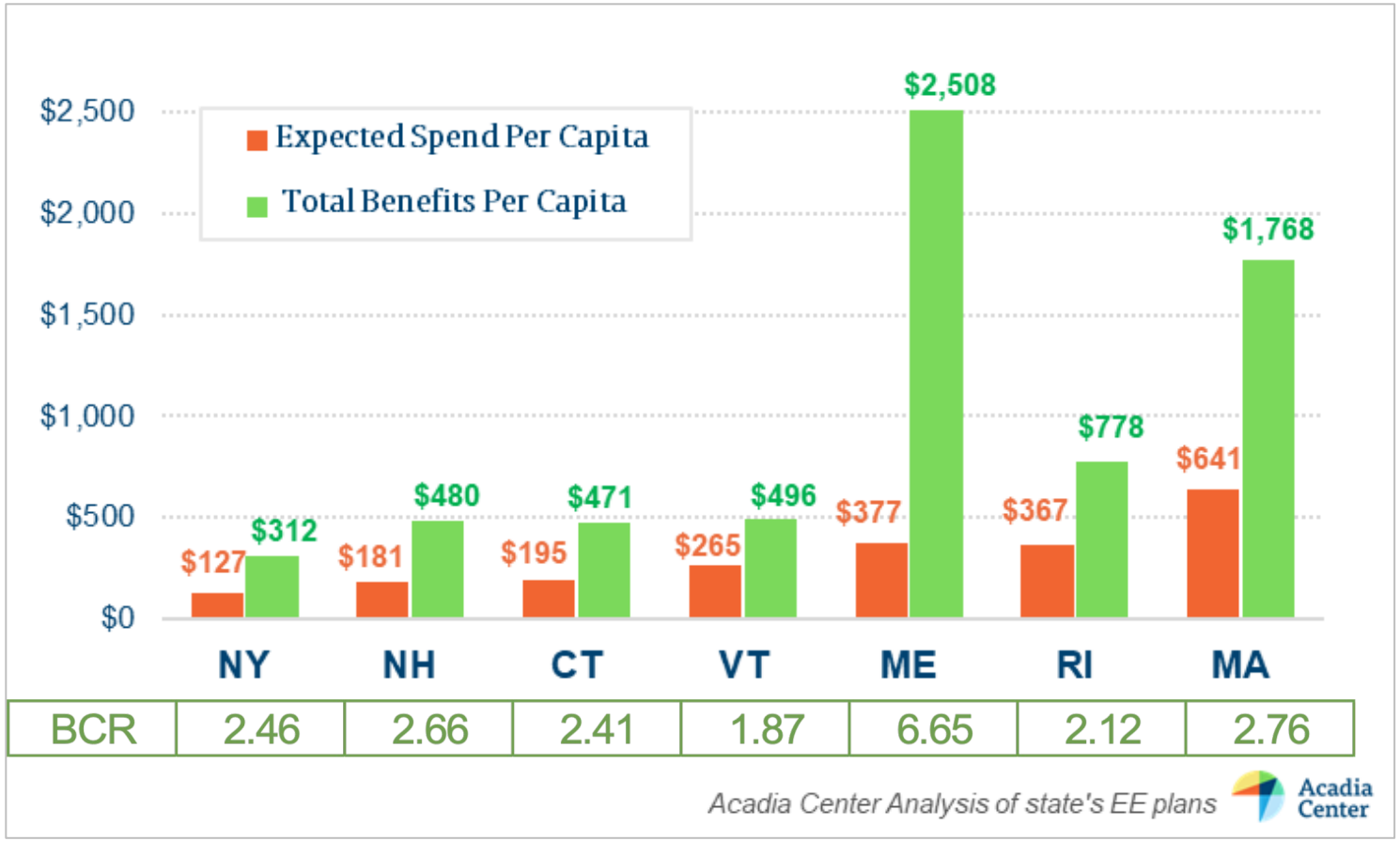


What We're Currently Investing in in New England



	NY	NH	CT	VT	ME	RI	MA
BCR	2.46	2.66	2.41	1.87	6.65	2.12	2.76

Acadia Center Analysis of state's EE plans

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Energy Efficiency's Impact Here in the Ocean State

Cumulative Impact of Energy Efficiency on RI Electric Use

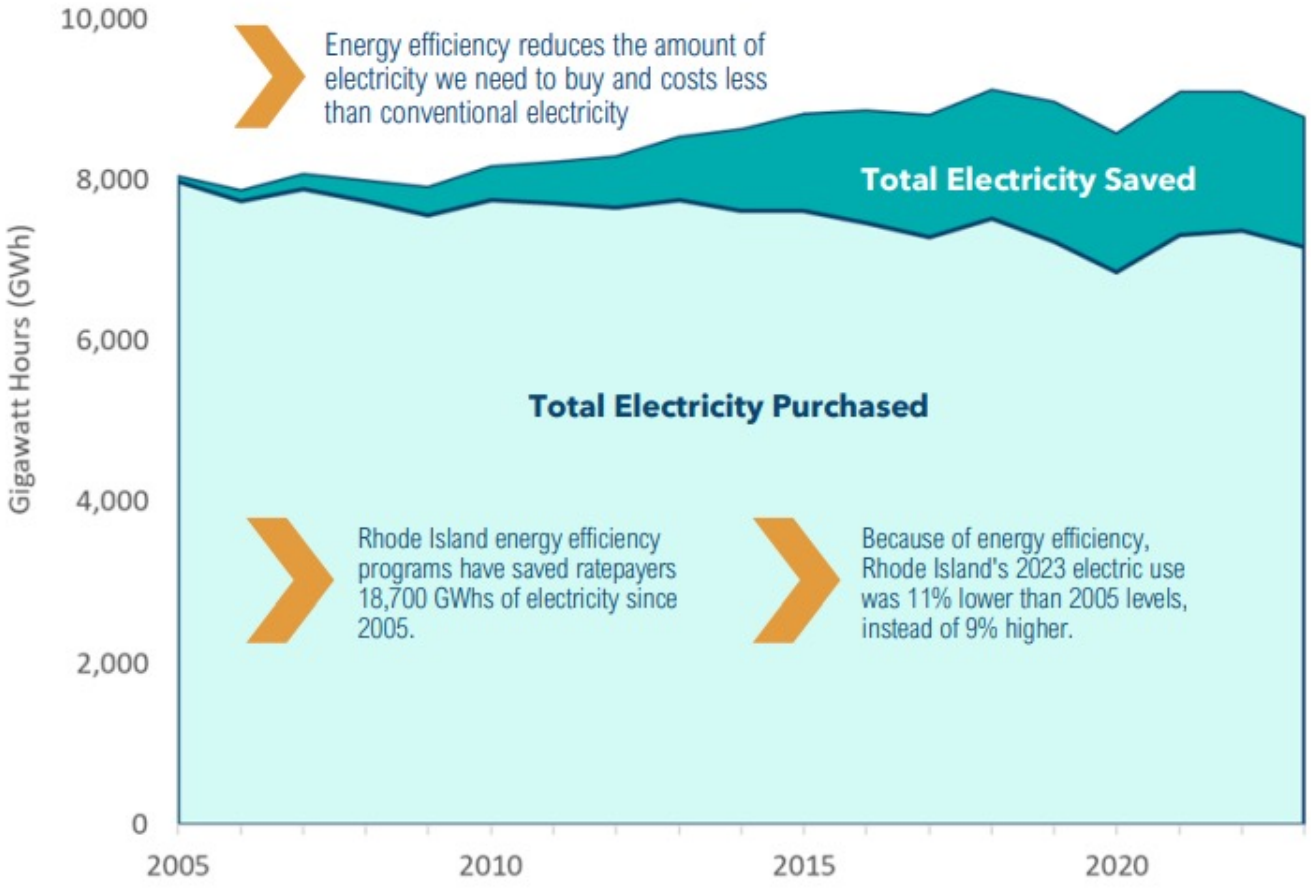

Figure 1. Cumulative Impact of Efficiency Investments on RI Electric Supply Requirements (2005-2023).

RI's 2024-2026 EE plan is **helping avoid almost $50m in added costs** if load was instead met by purchasing additional electric supply.

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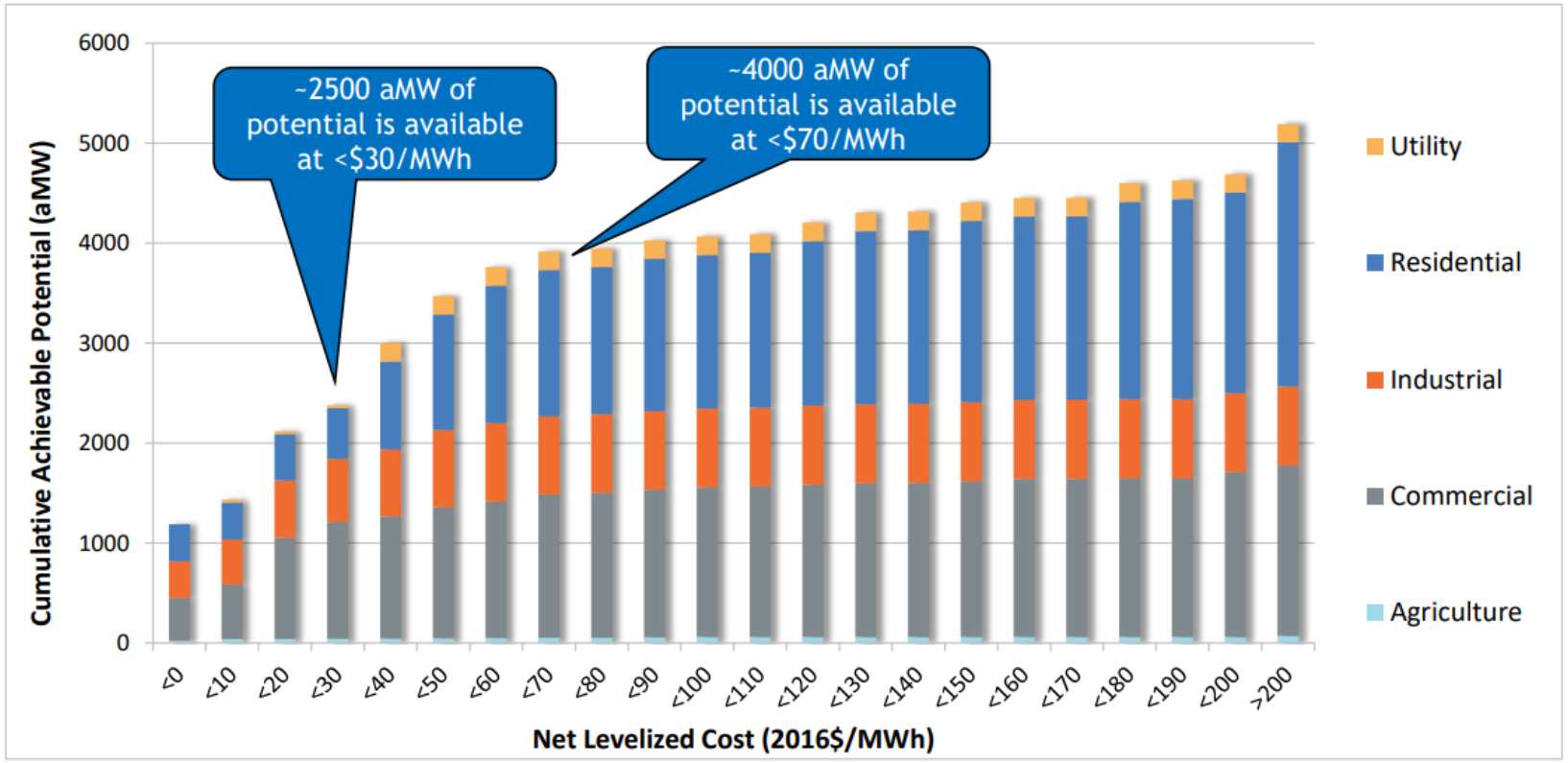
How Much Energy Efficiency is Out There?

Achievable Potential Supply Curve:
Add Up Each Measure Cost and Savings

Northwest Power and Conservation Council



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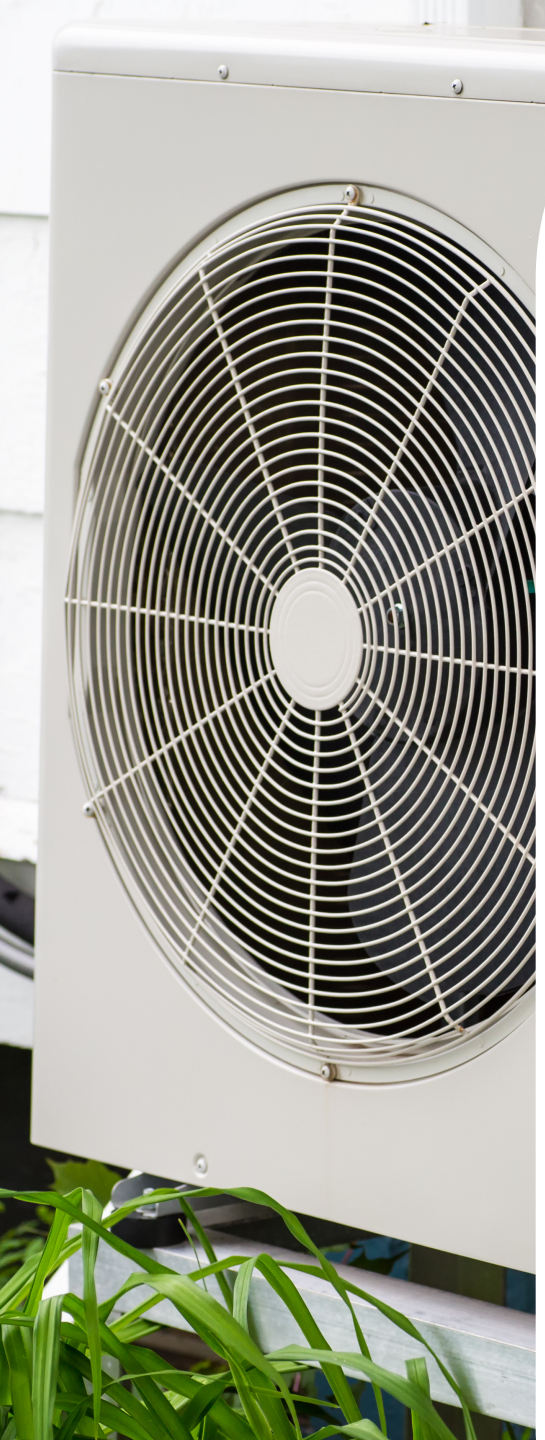
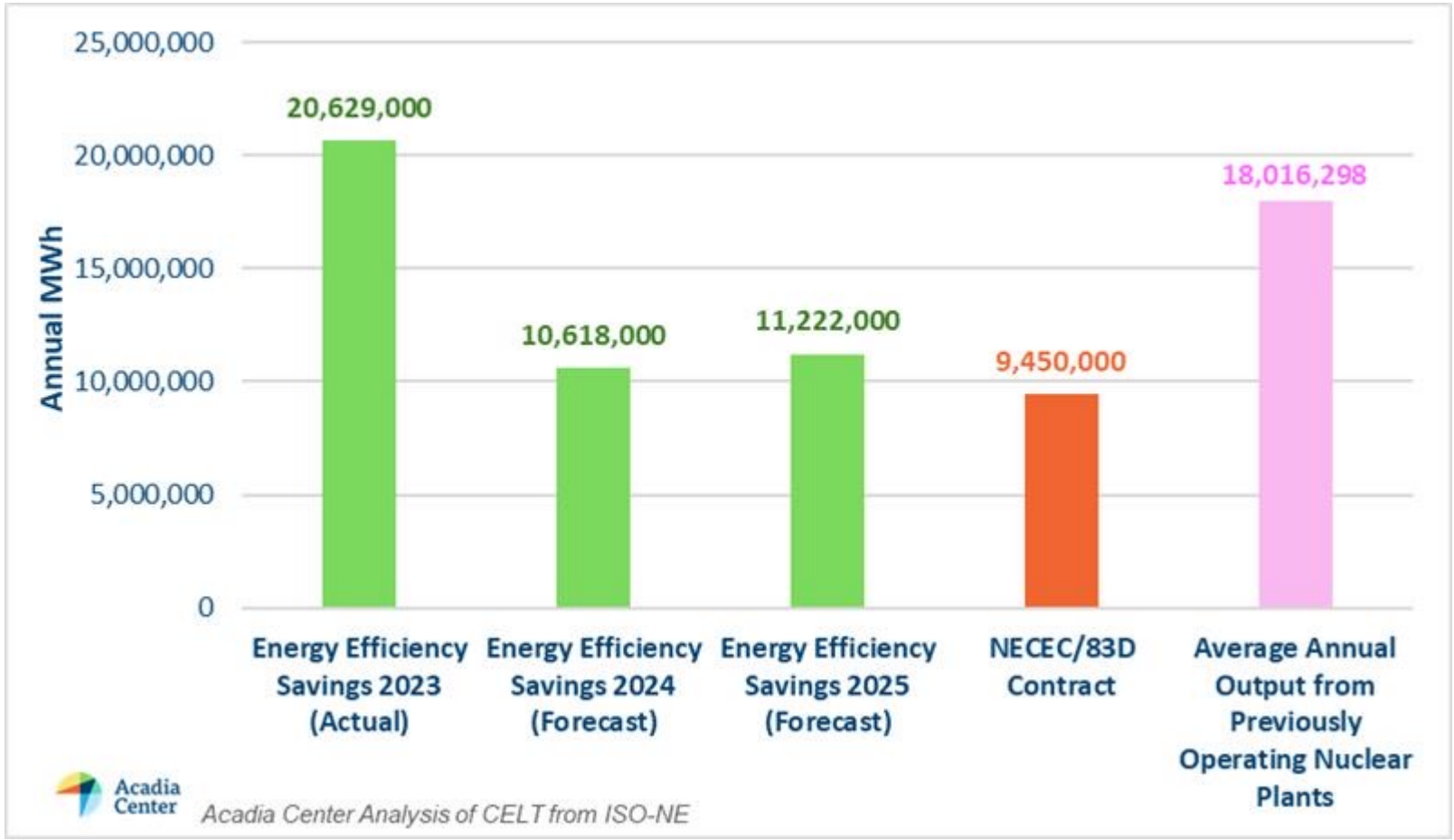


How Much Energy We're Currently Saving in NE



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New England's Future Load Growth:
Winter Peaks Driven Primarily by Building Space Heating

FIGURE 4

New England Peak Electric Demand: 2020 vs. 2050 5-Study Comparison

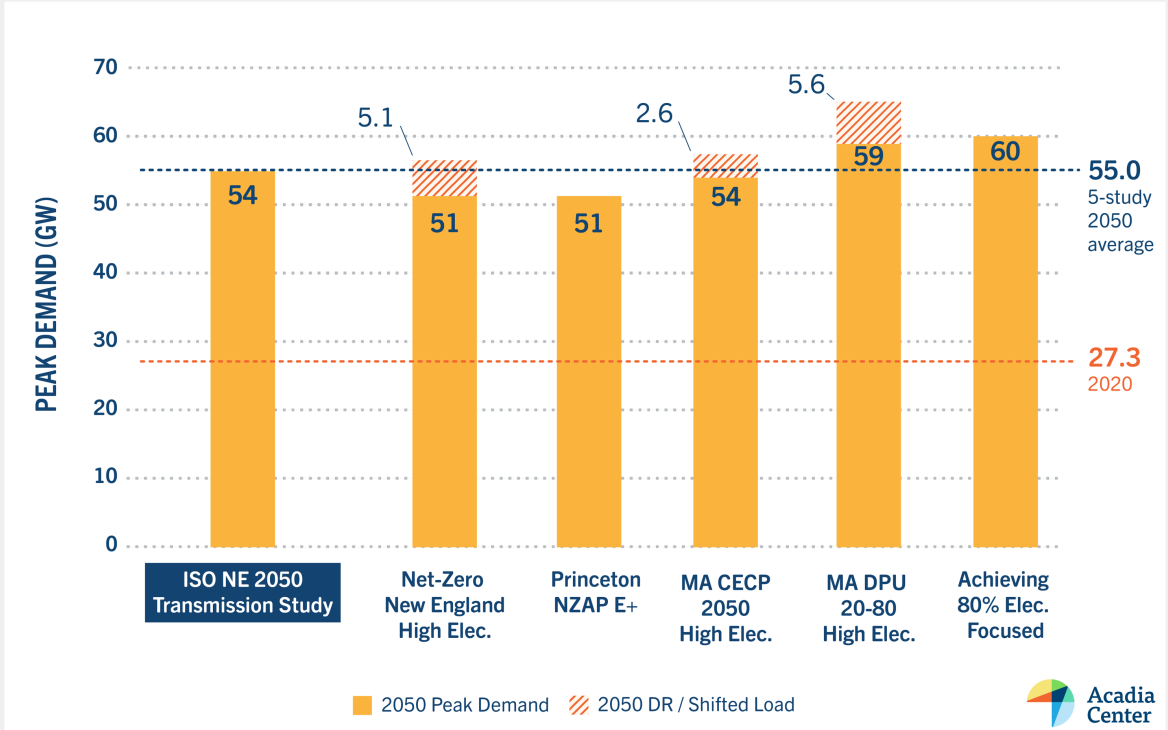
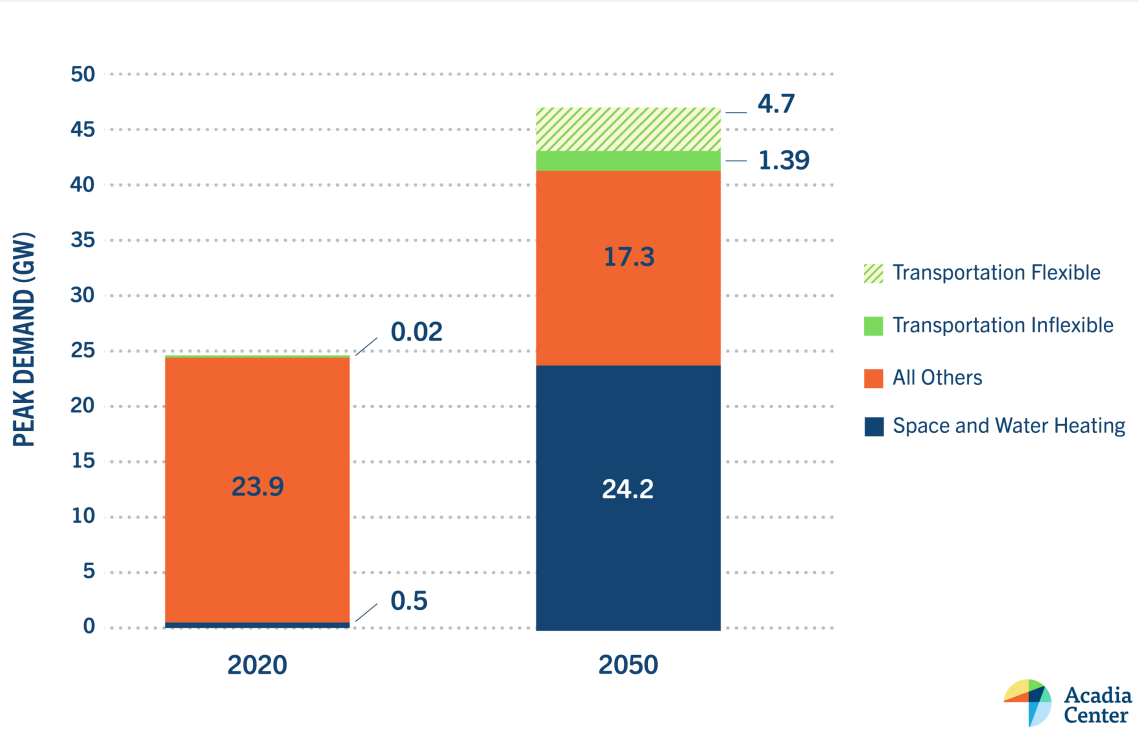


FIGURE 5

MA CECP Full Electrification Scenario: Average New England Peak Demand in Top 50 Hours: 2020 vs. 2050



Source: The Energy Is About to Shift – Acadia Center and Clean Air Task Force

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New England's Future Load Growth:
Annual Demand Driven Primarily by Growth in EVs

FIGURE 2
New England Total Annual End-Use Electric Loads: 2020 vs. 2050 5-Study Comparison

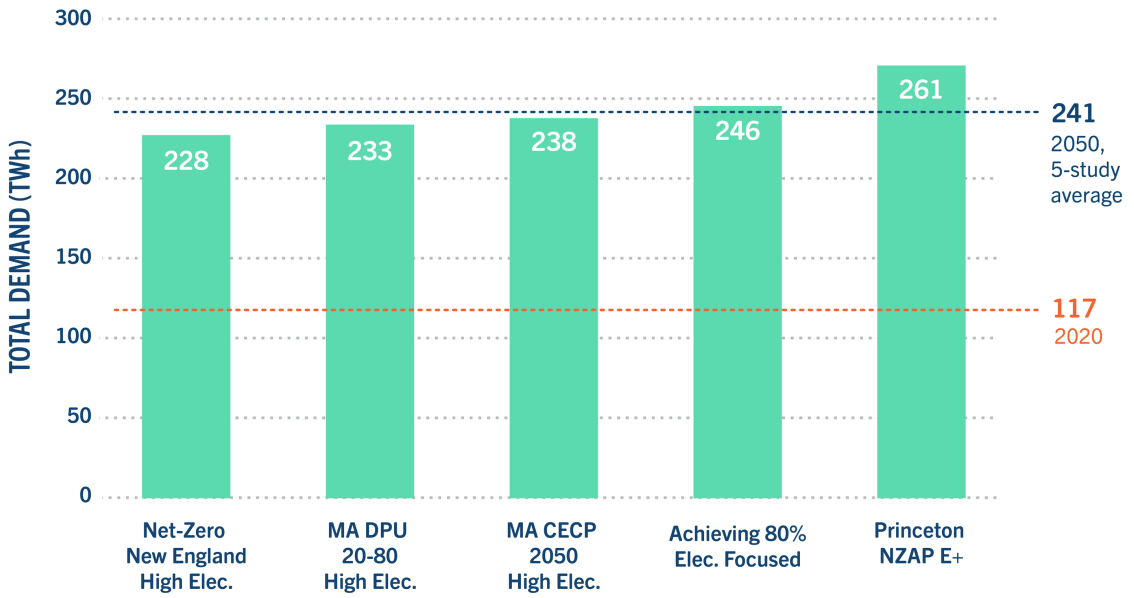
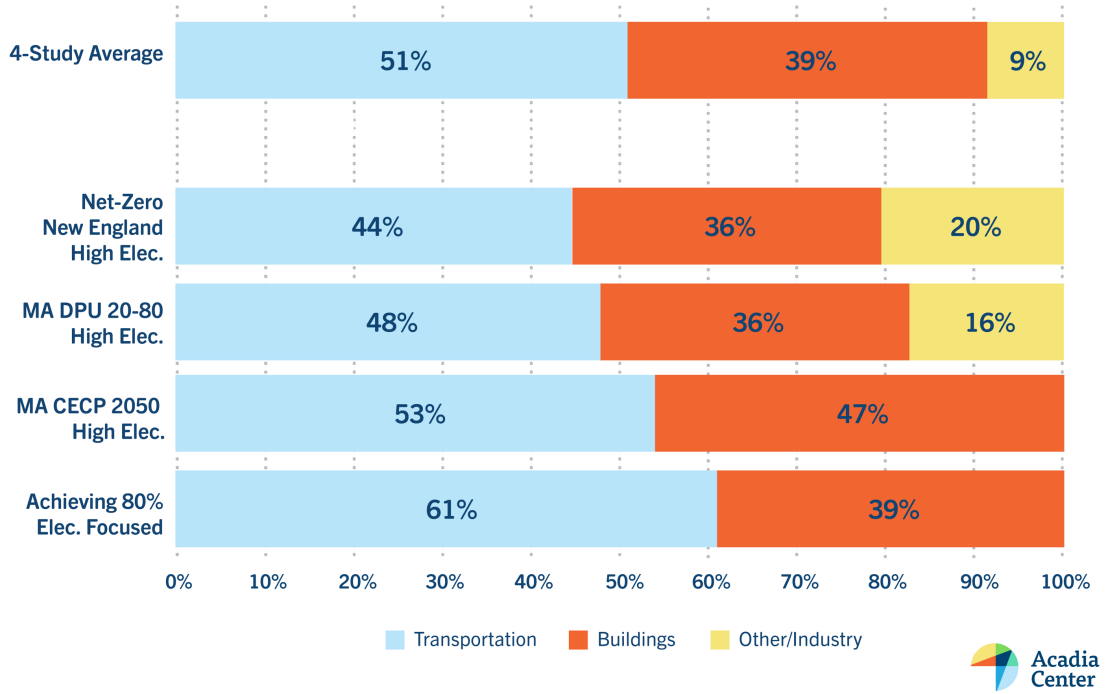


FIGURE 3
% of New England 2020-2050 Total Annual End-Use Electric Load Growth Attributable to Each Sector: 4-Study Comparison



Source: The Energy Is About to Shift – Acadia Center and Clean Air Task Force

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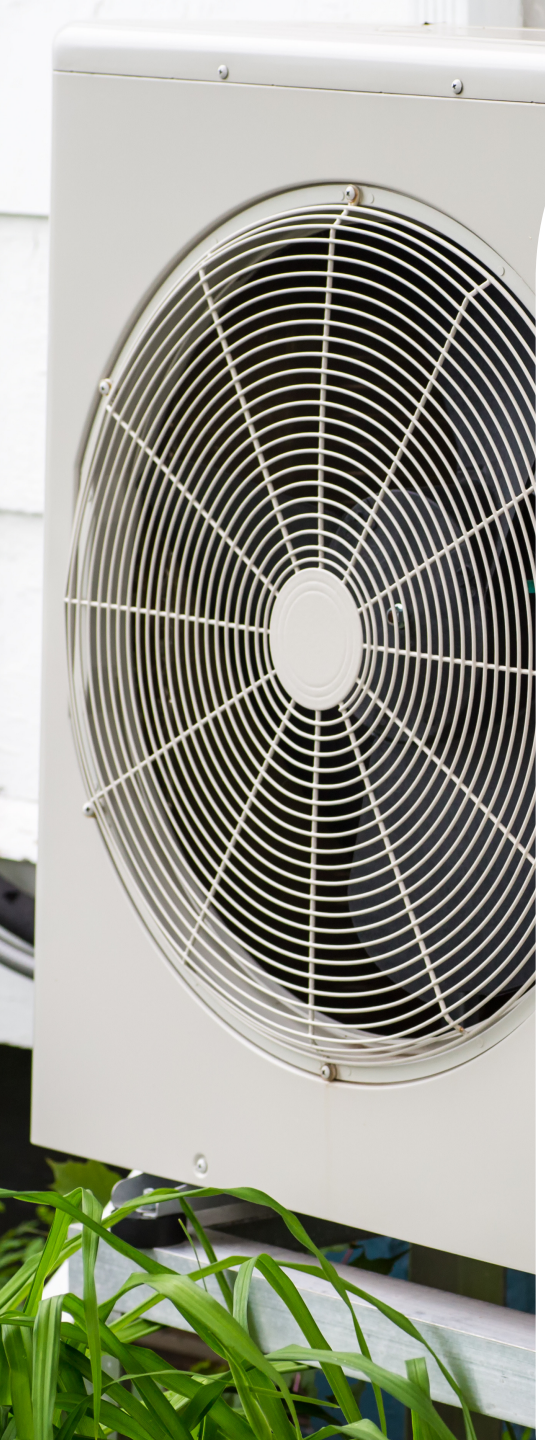

Grid Flexibility (Active Demand Management):
Opportunity to Add Greater Rigor in New England

Table 5. New England 2050 Peak Load Reduction from Demand Response and Assumed Flexibility of EV and Water Heating End Uses: 5-Study Comparison

STUDY & SCENARIO	2050 PEAK REDUCTION (GW)	2050 % PEAK REDUCTION	2050 % EV TOTAL LOAD FLEXIBLE	2050 % TOTAL WATER HEATING LOAD FLEXIBLE
MA DPU 20-80 High Electrification	5.6	-9.4%	50%	25%
MA CECP 2050 High Electrification	2.6	-4.6%	75%	0%
Princeton NZAP E+	Unknown[44]	Unknown	50%	20%
Net-Zero New England High Electrification	5.1	-10.1%	Unknown	0%
Achieving 80% Electrification Focused	Unknown	Unknown	Unknown	Unknown
Studies Average (Excluding Unknowns)	**4.4**	**-7.0%**	**58%**	**11%**

Source: The Energy Is About to Shift – Acadia Center and Clean Air Task Force

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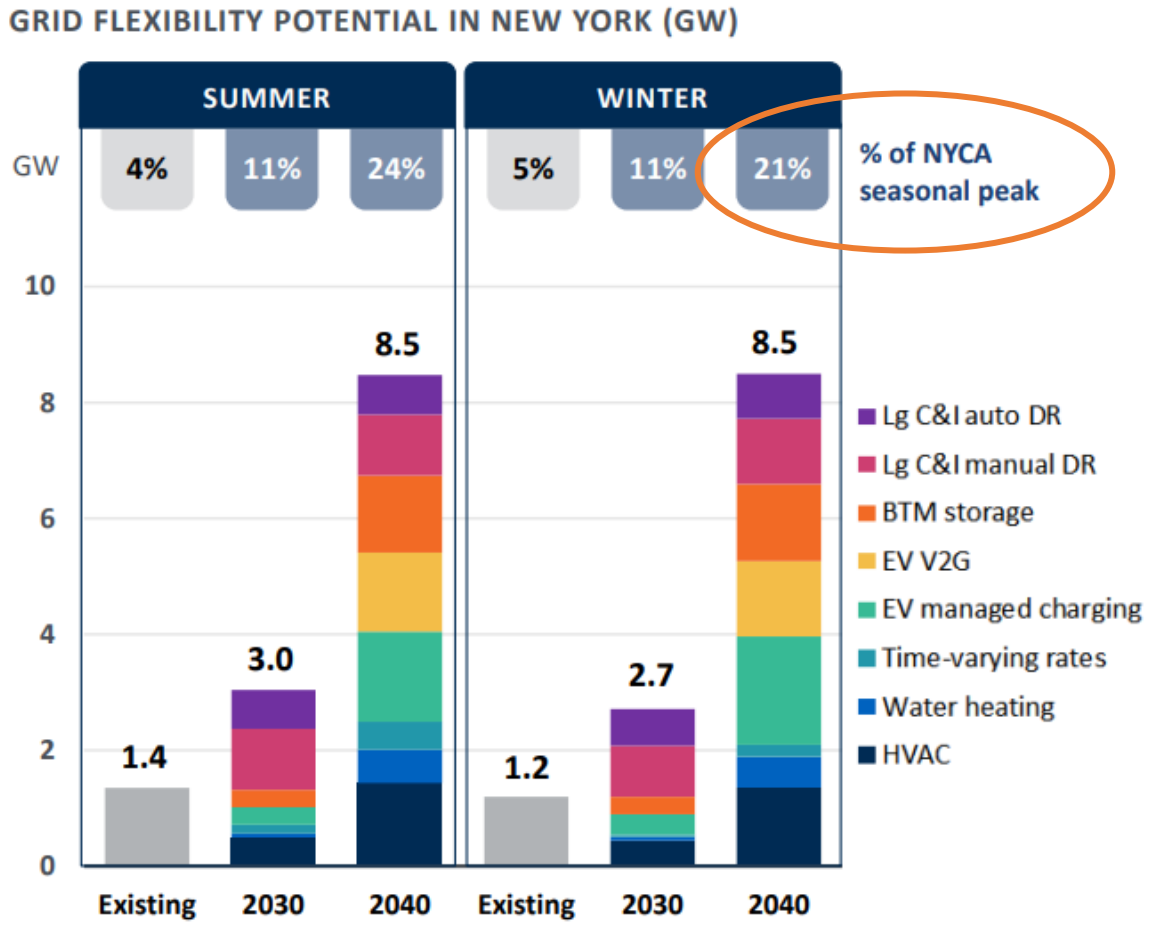
New Modeling in NY Shows > 3x grid flexibility potential



Source: Brattle Group
New York's Grid Flexibility Potential

This level of peak demand reductions would save New England **~$8B in transmission costs alone!**

**Assuming $750 million per GW of peak reduced below 51 GW, per ISO-NE 2050 Transmission Study.

The portfolio of grid flexibility measures could avoid $2.9 billion annually in power system costs by 2040, of which $2.4 billion could be returned to consumers.

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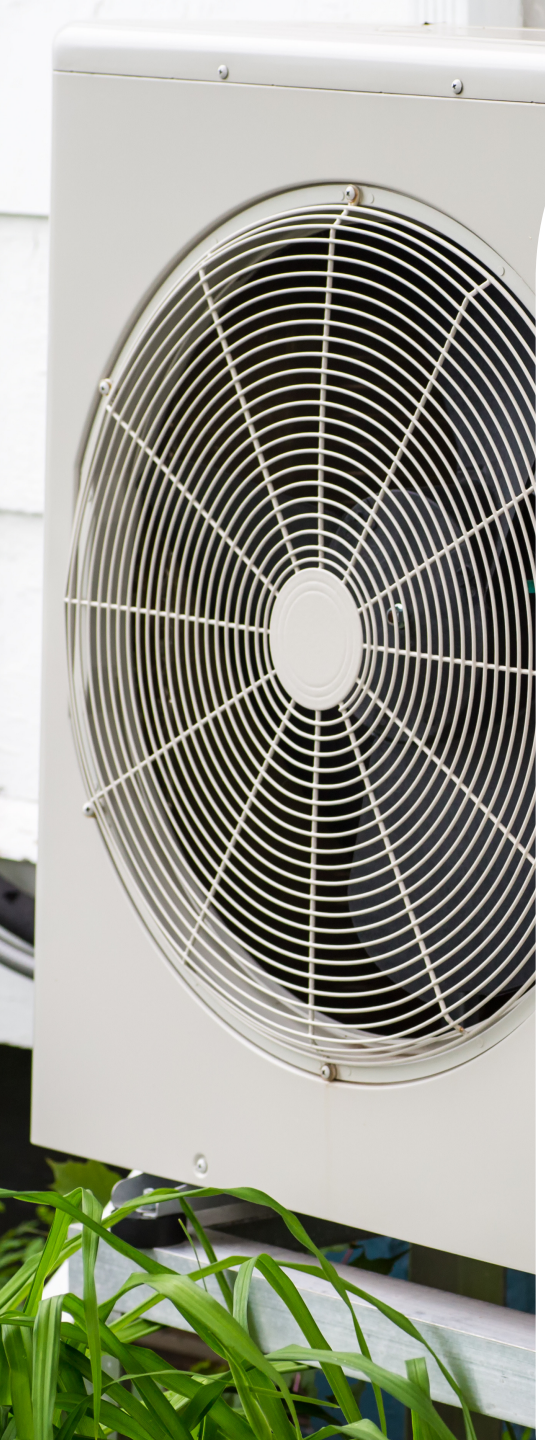

What's In Demand (and In Control):

The Role of Energy Efficiency and Demand Forecasting in Planning for the Region's Grid and Markets

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Dave Westman
Director, Regulatory & State Agency Affairs, VEIC

Brett Feldman
Energy Efficiency Manager, Rhode Island Energy

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Advancing the Clean Energy Future

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