

EVERSOURCE

SUSTAINABILITY & ENVIRONMENTAL AFFAIRS

ACEC/MA Utilities & Energy Conference 2024



Agenda

- Sustainability and Climate Leadership
- Regulatory Environment
- Future of the Grid
- Clean Energy Plans at Eversource
- ESMP
- Future of Gas
- Next Steps



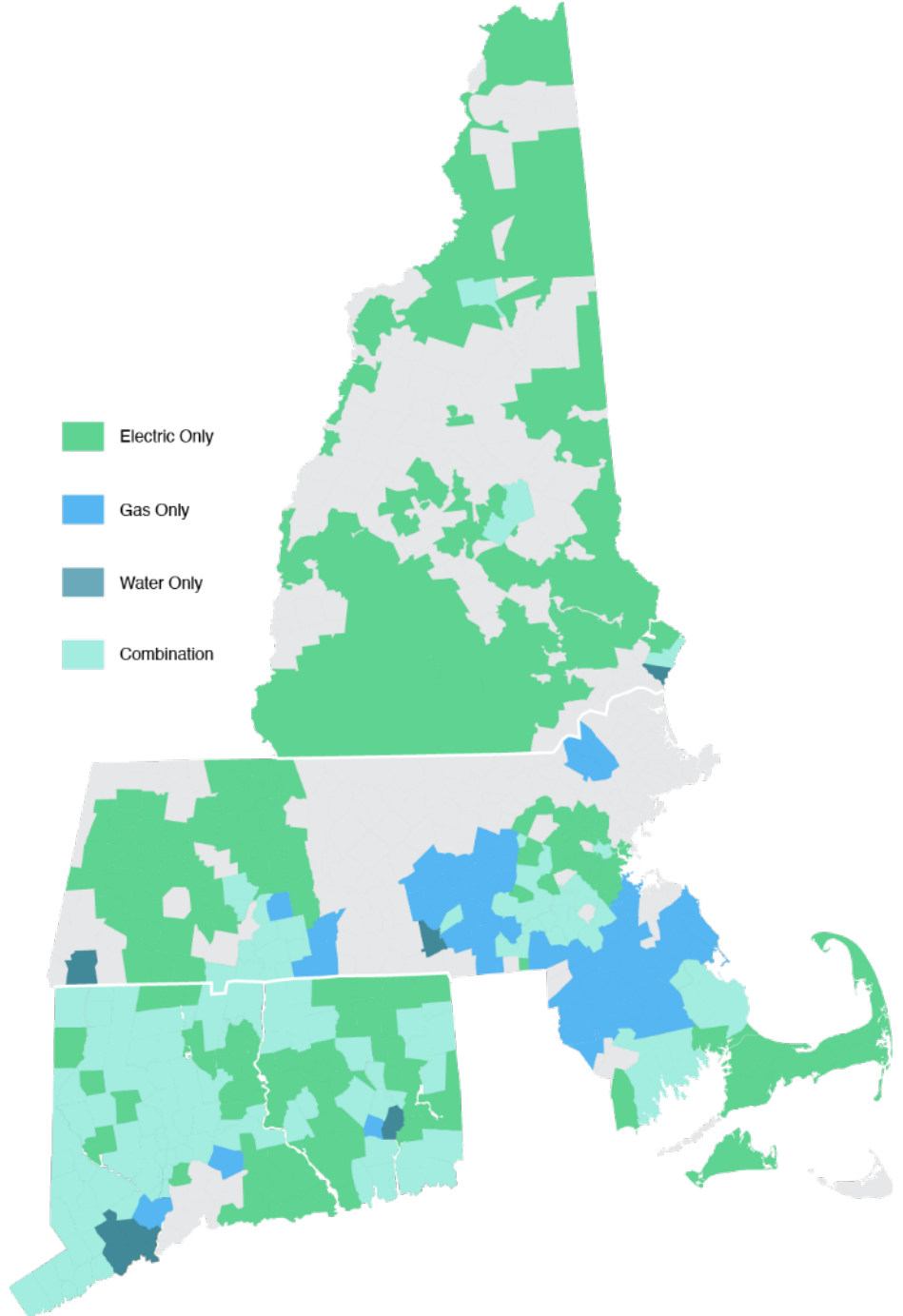
ABOUT EVERSOURCE

- Fortune 500 Company
- Largest energy provider in the Northeast
- Various mergers and acquisitions, adopting “Eversource” name in 2013

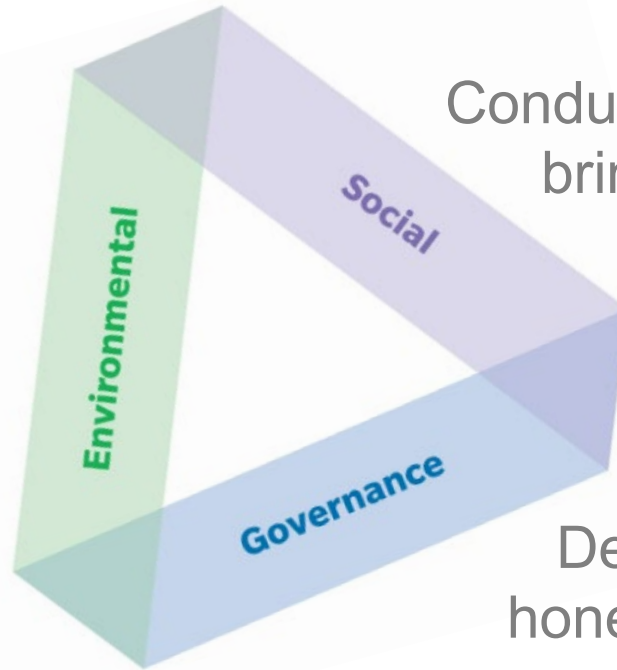
10,000
employees

4.4 million
customers

3,285,000 ... electric
890,000 gas
237,000water



Committed to environmental stewardship and addressing climate change



Conducting our business to bring value to our communities and embrace our differences

Dedicated to doing the right thing with honesty, integrity and transparency

Addressing Climate Change as a Cornerstone

We are focused on supporting the enablement of a clean energy transition while maintaining reliable delivery of electric, gas and water services.



Focusing On Our Own GHG Footprint

In addition to supporting our states in their climate targets, we established an ambitious goal to achieve Carbon Neutrality by 2030.

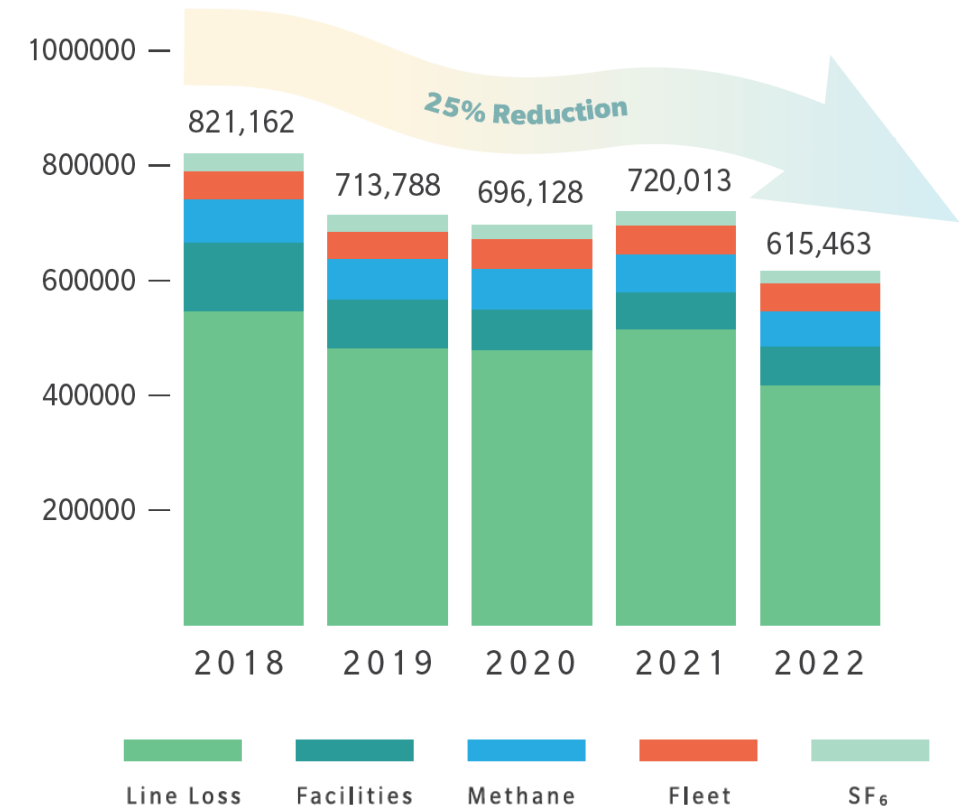
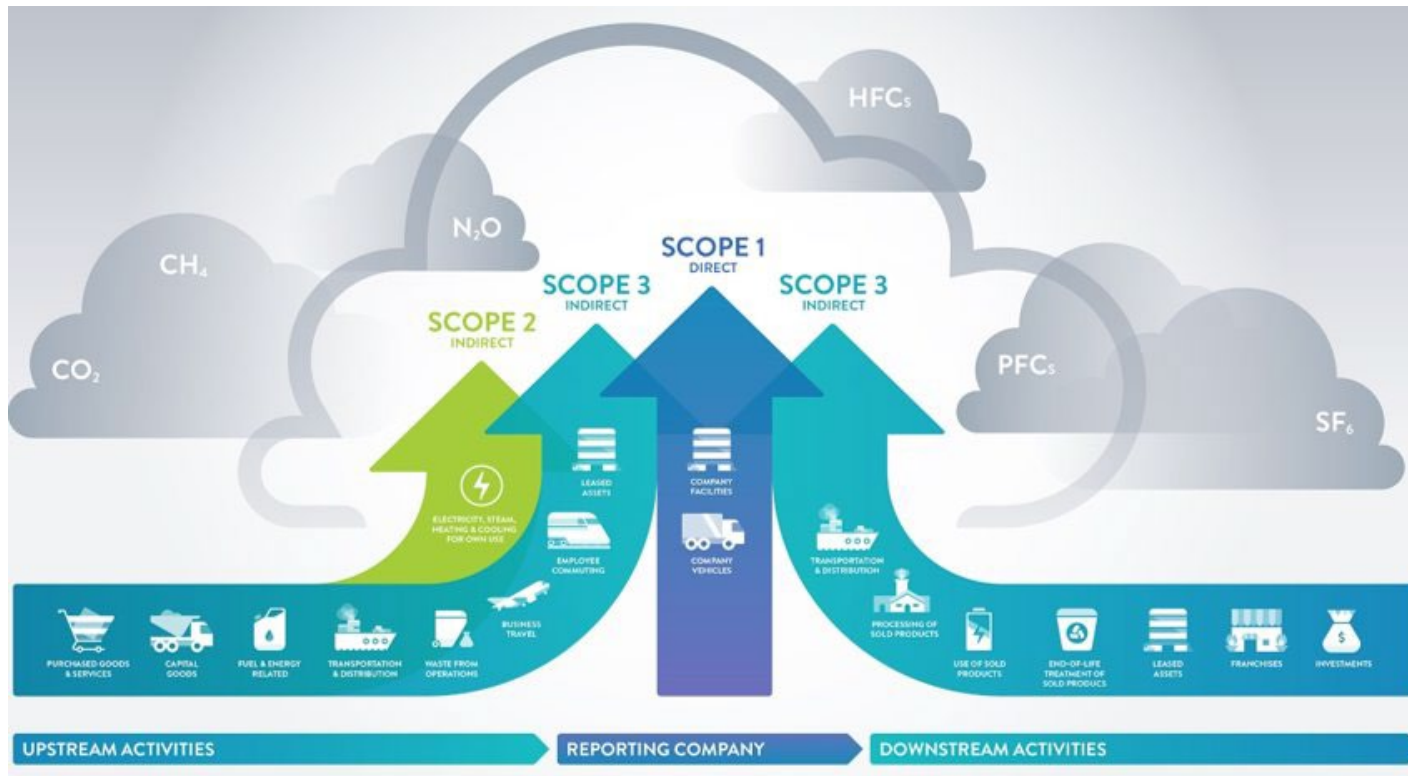
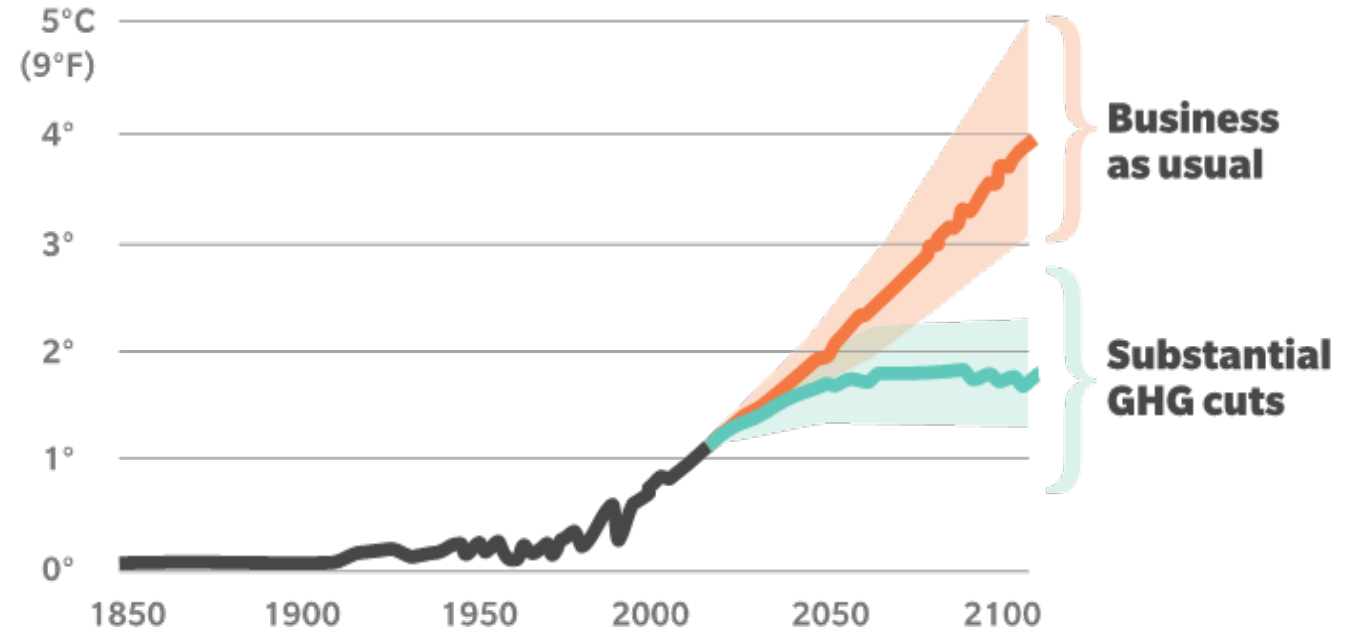
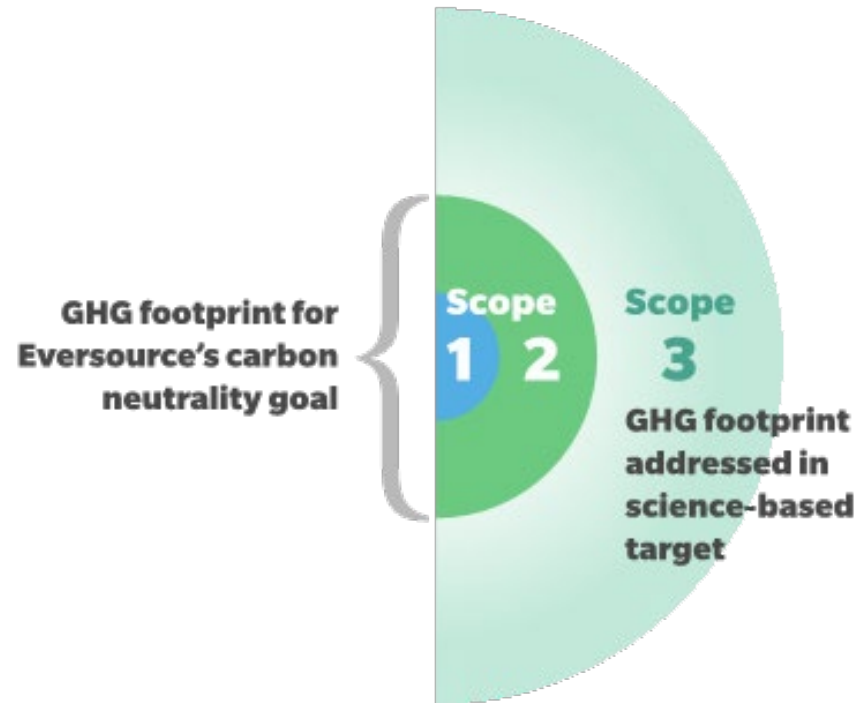


Image Source: VitalMetrics (based on Greenhouse Gas Protocol)

Looking Beyond our Operational Footprint



- The decision to pursue an SBT builds on a strong foundation of climate leadership
- Aligns GHG reduction efforts with climate science to limit global warming to 1.5°C
- Addresses all three scopes of emissions with a focus on downstream energy use of our customers
- Achieving an SBT will depend heavily on the execution of policies to decarbonize the grid

Regulatory Environment

Eversource plays a critical role addressing ambitious state and federal climate goals. We are:

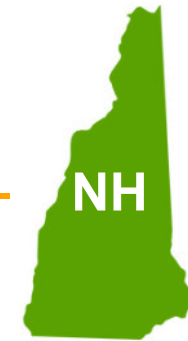
- Investing in infrastructure to support electrification
- Exploring innovative solutions to decarbonize the heating sector
- Engaging stakeholders with a focus on environmental and social equity



- Net-zero emissions by 2050
- Interim targets of at least 50% below 1990 levels by 2030 and at least 75% below 1990 levels by 2040



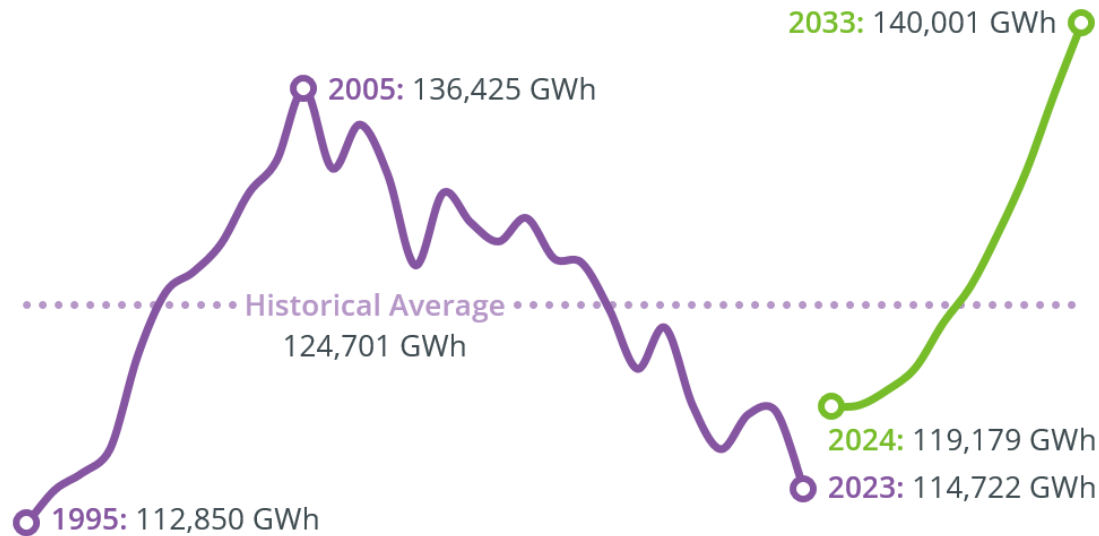
- Target of 45% emission reduction below 2001 levels by 2030 and at least 80% below 2001 levels by 2050
- Zero-carbon electric grid by 2040



- The NH Climate Action Plan recommends targets to reduce GHG emissions by 80% below 1990 levels by 2050

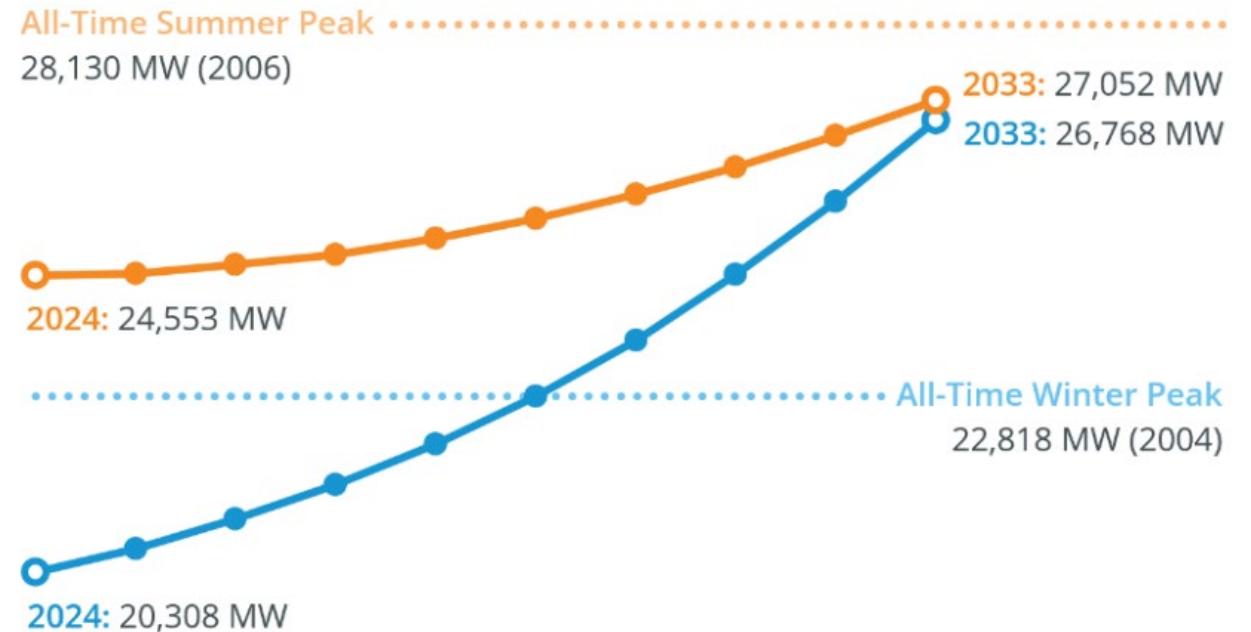
- Policies favoring electrification of heating and transportation sectors are expected to more than double New England electric demand by 2050 with higher-than-ever peaks within the next decade.
- New England peaks are expected to shift from the summer to winter due to increased heating electrification with an increase of more than triple that of today by 2050.

Historical and Forecast Net Energy Use



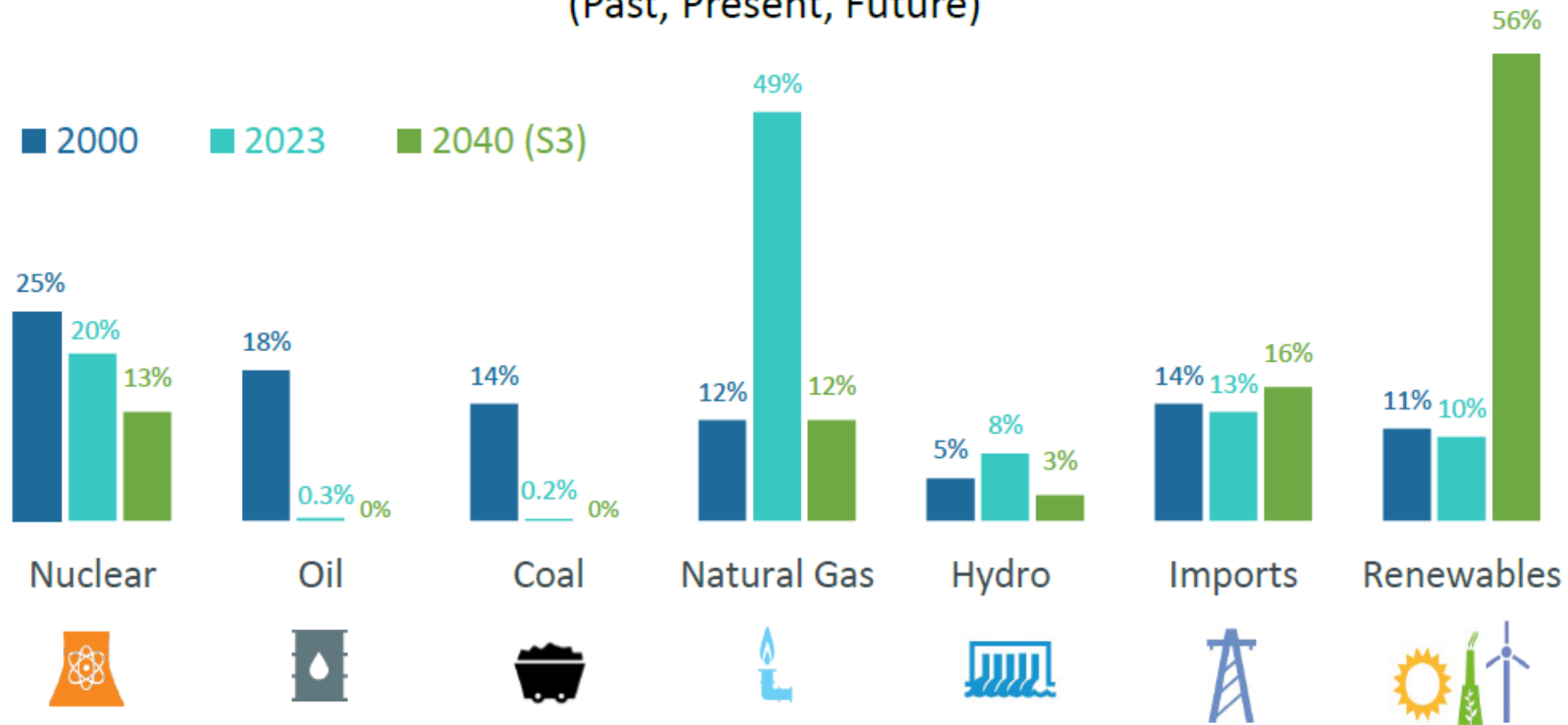
Source: [isonewswire.com](https://www.isonewswire.com)

Summer and Winter 50/50 Net Peak Forecast



ISO-NE Resource Mix Evolution

Percent of Total **Electric Energy** Production by Source
(Past, Present, Future)



Source: ISO New England [Net Energy and Peak Load by Source](#); data for 2023 is preliminary and subject to resettlement; data for 2040 is based on Scenario 3 of the ISO New England [2021 Economic Study: Future Grid Reliability Study Phase 1](#).

Renewables include landfill gas, biomass, other biomass gas, wind, grid-scale solar, behind-the-meter solar, municipal solid waste, and miscellaneous fuels.

Source: ISO New England

Clean Energy Plans at Eversource

- Nation-leading Energy Efficiency Programs
- No ownership of fossil-fuel generated energy supply
- Strong focus on growing regulated solar portfolio
- Dedicated ESG & Climate governance with oversight at the board level

Delivering Clean, Reliable Energy & Water



Enabling the Clean Energy Future



- Incorporated MA's anticipated demand growth assumptions for EV adoption and electric heating
- Analyzed expected growth by region, community and circuit
- Identified areas where system upgrades are needed, focusing first on low-cost options and non-wires alternatives
- Leveraged formal stakeholder engagement process to seek communities' perspectives before projects proceed to siting

The ESMP identifies needed investments over the next 10 years to support clean energy resources and drive improvements in grid reliability and resiliency.



Increases available electrification hosting capacity by 180% over the next decade.



Supports the adoption of 2.5 million electric vehicles statewide, 60% of the state's 2050 goals



Allows for the adoption of 1 million heat pumps, 70% of the state's 2050 goal in our service territory



Enables 5.8 GW of solar, exceeding the state's 2040 goals and reaching over 60% of the 2050 goals

AMI PROGRAM VISION STATEMENT



Advanced metering infrastructure (AMI) is one of our most critical investments in modernizing how we do business, transforming the way our customers engage with Eversource and experience electric service, and supporting our carbon reduction goals.

Beyond simply replacing aging meters, the AMI project provides a platform which elevates the customer experience and enables significant operational efficiencies. It supports new rates structures and programs that can promote optimal adoption of distributed energy resources and electric vehicles.

With real-time monitoring and state-of-the-art AMI 2.0 grid-edge capabilities, AMI is a critical component of our intelligent grid, enabling faster outage detection, enhancing grid visibility, and improving how we plan, optimize, and operate our distribution system.

Future of Gas

We've built a **first-in-the-nation** renewable energy project using networked geothermal technology

Pilot connects
36
commercial
and residential
buildings

Circulates the stable underground temperature of the earth

55°



Depth of
Geothermal Well
Network
600-700 ft

Greenhouse gas emissions reduced by up to

60%

- Policies are seeking Non-Pipe Alternatives (NPA) as method to slow investments in existing gas infrastructure in favor of electrified options
- Working with customers on new connection requests to educate on gas alternatives
- Safety, reliability and affordability remain paramount during this transition
- Integrated planning across the company is supporting the business strategy and response to regulatory requirements (i.e. 20-80 Docket)
- Engaging, educating and preparing stakeholders is essential including training employees with skills needed for a Just Transition
- Our Networked Geothermal Pilot in Framingham MA is an excellent example of our strategic planning and workforce development for how our business is preparing for the future of gas (Commissioning event in June!)

Some Important Near Term Next Steps

- Enhanced integrated electric and gas planning, including non-pipe alternatives (NPA) process
- Regulatory dockets require executing on electrification pilots and submission of Climate Compliance Plans
- MassDEP to advance the Clean Heat Standard (CHS) framework to address incentives around electrification (moving away from gas and delivered fuels)
- MA Legislative process to address recommendations of the Commission on Energy Infrastructure Siting and Permitting



Commonwealth of Massachusetts

Commission on Energy Infrastructure
Siting and Permitting

Recommendations to Governor Maura Healey
on Clean Energy Infrastructure Siting and Permitting Reform

March 29, 2024