**STATE OF NEW HAMPSHIRE**

**BEFORE THE**

**NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

**DOCKET NO. DE 20-161**

**2020 LEAST COST INTEGRATED RESOURCE PLAN**

**SUPPLEMENTAL TESTIMONY OF**

**RUSSEL JOHNSON, LAVELLE FREEMAN, GERHARD WALKER, MATTHEW COSGRO, AND TRACY GIONFRIDDO**

**On behalf of Public Service Company of New Hampshire**

**d/b/a Eversource Energy**

**October 18, 2022**

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**PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**
**d/b/a EVERSOURCE ENERGY**
**2020 LEAST COST INTEGRATED RESOURCE PLAN**

**Docket No. DE 20-161**

## I. INTRODUCTION

**Q. Mr. Johnson, please state your full name, position and business address.**

A. My name is Russel D. Johnson. I am employed by Eversource Energy Service Company as Director of Distribution Engineering. My business address is 780 North Commercial Street, Manchester, New Hampshire.

**Q. Have you previously sponsored testimony in this proceeding?**

A. Yes, I co-sponsored the rebuttal testimony filed on behalf of Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the "Company") in this proceeding. The Company's rebuttal testimony sets forth my educational and professional experience.

**Q. Mr. Freeman, please state your full name, position and business address.**

A. My name is Lavelle A. Freeman. I am employed by Eversource Energy Service Company as Director of Distribution System Planning. My business address is 247 Station Drive, Westwood, Massachusetts 02090.

**Q. Have you previously sponsored testimony in this proceeding?**

A. Yes, I co-sponsored the rebuttal testimony filed on behalf of the Company in this proceeding. The Company's rebuttal testimony sets forth my educational and professional experience.

**Q. Mr. Walker, please state your full name, position and business address.**

A. My name is Gerhard Walker. I am the Manager for Advanced Forecasting and Modeling for Eversource Energy. My business address is 247 Station Drive, Westwood, Massachusetts 02090.

**Q. Have you previously sponsored testimony in this proceeding?**

A. Yes, I co-sponsored the rebuttal testimony filed on behalf of the Company in this proceeding. The Company's rebuttal testimony sets forth my educational and professional experience.

**Q. Mr. Cosgro, please state your full name, position and business address.**

A. My name is Matthew Cosgro. A. My name is Matthew Cosgro. I am Lead Engineer, Distribution System Planning for Public Service Company of New Hampshire d/b/a Eversource Energy. My business address is 780 North Commercial Street, Manchester, NH 03101.

**Q. What are your principal responsibilities in this position?**

A. As Lead Engineer, I am responsible for the long-term planning and analysis of the New Hampshire distribution system.

**Q. Please summarize your professional and educational background.**

A. I graduated from Western New England College in 2008 with a Bachelor of Science degree in Electrical Engineering. I earned a Master of Science degree in Power Systems Management from Worcester Polytech Institute in 2013. I began working for the Company as a student intern in Distribution Engineering. Upon graduation in 2008 I participated in the two-year Engineer in Training program that has new employees experience various departments within the company. At its completion, I joined the Distribution System Planning Department.

**Q. Have you previously testified before the Department or other regulatory agencies?**

A. No, I have not previously testified before the Commission.

**Q. Ms. Gionfriddo, please state your full name, position, and business address.**

A. My name is Tracy A. Gionfriddo. I am a Senior Environmental Specialist for the Sustainability Team at Eversource Energy Service Company. My business address is 107 Selden Street, Main Building North, Second Floor, Berlin, Connecticut.

**Q. What are your principal responsibilities in this position?**

A. As a Senior Environmental Specialist in Sustainability, I am responsible for supporting the Company's response to climate change, as well as monitoring energy and multi-disciplinary environmental policies relevant to the Company. I oversee the completion of the Corporate Greenhouse Gas Inventory and its

independent verification as well as a multitude of voluntary and required greenhouse gas emissions reporting. I am also responsible for tracking and forecasting greenhouse gas emissions as they relate to Eversource's 2030 Carbon Neutrality Goal, among other sustainability initiatives. In my policy function, I coordinate responses from cross-functional groups to proposed state and federal environmental laws and regulations and represent Eversource during coordination with state and Federal agencies.

**Q. Please summarize your professional and educational background.**

A. I graduated from Colby College in Waterville, Maine in 1989 with a Bachelor of Arts degree in biology and environmental studies. I earned a Master of Environmental Management from Duke University in 1991. I have over 30 years' experience in the environmental field working for the State of North Carolina, as a consultant for the United States Environmental Protection Agency, and as an air and general consultant for several groups. For the majority of my career, I worked as an Environmental Analyst at two law firms providing subject matter expertise in compliance, litigation and transactional cases. In 2007, I joined Eversource (formerly Northeast Utilities).

**Q. Have you previously testified before the Commission or other regulatory agencies?**

A. I have not testified before this Commission. I have testified before regulatory agencies in both Connecticut and Massachusetts as well as legislative commissions

and subcommittee hearings in Connecticut.

**Q. What is the purpose of your joint testimony?**

A. The purpose of our joint testimony is to support the Company's supplement to its 2020 Least Cost Integrated Resource Plan ("2020 LCIRP"), which accompanies this testimony (the 2020 LCIRP Supplement). The Company agreed to file the 2020 LCIRP Supplement in response to the direct testimony of the Department of Energy ("DOE"), submitted on August 19, 2022.

This testimony also addresses follow-up questions received from Clean Energy New Hampshire ("CENH") at the technical session conducted subsequent to the Company's filing of rebuttal testimony, regarding how the Company will incorporate transition of the electric grid into future iterations of the LCIRP. As detailed in the Company's rebuttal testimony, Eversource recommends that a working group be convened prior to development of its next LCIRP filing to allow for stakeholder input regarding how best to address the ongoing electric grid transition. Our testimony provides a brief overview of certain initiatives that have been commenced by the Company or its affiliates and that the Company would expect to incorporate into the next LCIRP. How best to incorporate these initiatives into the format of the LCIRP is an example of a topic that could be addressed by the working group.

**Q. What is the 2020 LCIRP Supplement intended to accomplish?**

A. In its direct testimony, the DOE asserted that the Company has not addressed RSA 378:39 as part of its 2020 LCIRP filing and should submit a supplement that addresses the criteria of RSA 378:39. RSA 378:39 sets forth the standard of review that the Commission should apply to its review of an LCIRP. RSA 378:39 states that "[i]n deciding whether or not to approve the utility's plan, the commission shall consider potential environmental, economic, and health-related impacts of each proposed option."

**Q. Did the Company agree with DOE's recommendation?**

A. Yes. The Company considers environmental, economic and health impacts associated with all of its project decisions to the extent that those factors are relevant and appropriate to consider. However, the Company agrees that these analytical factors were not discretely identified or discussed in the 2020 LCIRP. Accordingly, this testimony is designed to present the 2020 LCIRP Supplement, discussing these factors in order to facilitate the Commission's review under RSA 378:39.

**Q. How is your testimony organized?**

A. Following this introduction, Section II describes how the Company's 2020 LCIRP Supplement responds to the DOE's recommendation. Section III provides additional details on the Company's transition to support the electric grid of the future. Section IV is the conclusion.

## II. COMPANY'S COMPLIANCE WITH RSA 378:39

**Q. What statutory provisions are encompassed in RSA 378:39?**

A. The statutory provision designated as RSA 378:39, states as follows:

> **378:39 Commission Evaluation of Plans.** The commission shall review integrated least-cost resource plans in order to evaluate the consistency of each utility's plan with this subdivision, in an adjudicative proceeding. In deciding whether or not to approve the utility's plan, the commission shall consider potential environmental, economic, and health-related impacts of each proposed option. The commission is encouraged to consult with appropriate state and federal agencies, alternative and renewable fuel industries, and other organizations in evaluating such impacts. The commission's approval of a utility's plan shall not be deemed a pre-approval of any actions taken or proposed by the utility in implementing the plan. Where the commission determines the options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts, the following order of energy policy priorities shall guide the commission's evaluation:
>
> I. Energy efficiency and other demand-side management resources;
>
> II. Renewable energy sources;
>
> III. All other energy sources.

**Q. Does the Company consider the potential environmental, economic, and health-related impacts associated with its planning process and/or specific projects that it selects?**

A. Yes. As explained in the Company's rebuttal testimony, there are two key drivers of the Company's decisions regarding investment in its distribution system, which are: (1) maintaining and improving the safety and reliability of the distribution system for the benefit of all customers; and (2) accomplishing this goal at a reasonable cost. On a project-by-project basis, the Company considers a range of

project attributes other than impact on reliability and cost, including environmental considerations (e.g., potential impacts and avoidance measures to wetlands or other resource areas, etc.), line losses and other factors. For an electric distribution company, public-health impacts are intertwined with environmental impacts. Similarly, the reliability and resiliency improvements are project impacts that have a direct nexus with economic impacts. Therefore, maintaining a strong focus on reliability on a project-by-project basis fulfills the statutory obligation.

The Company's 2020 LCIRP Supplement also discusses the reasonably available methods for accounting for these impacts. Eversource Energy has performed more extensive analyses of impacts associated with its system in other jurisdictions. However, these more extensive analyses typically require third-party consultants and significant costs that are not justified on a project-by-project basis (e.g., the Connecticut integrated resource process prior to 2015). The Company's focus on the reliability of the distribution system is the most cost-effective way to ensure positive project impacts in the areas of environmental, economic, and health-related impacts because this is the area where the Company has the greatest control and that is consistent with the Company's core mission as a distribution company.

**Q. How does the Company evaluate the reliability of each project option?**

A. The Company considers several factors when evaluating the reliability benefit of project alternatives. The nature of the evaluation and the data, models and tools

employed might be different depending on the type of project (substation, distribution feeder, interconnection, etc.), but these evaluations typically include:

- Applying bulk substation and distribution feeder planning criteria to determine criteria violations and evaluate alternatives and mitigation measures to provide safe reliable service in accordance with planning and design standards.

- Assessing the improvement in customer reliability experience that would be expected as compared with the historical or baseline reliability performance measured by various indices including SAIDI, SAIFI and CAIDI.

- Evaluating the ability of the system to withstand or limit the impact of a first contingency (N-1) equipment failure or fault on the electric system and minimize the frequency and duration of customer interruptions.

- Reviewing the electric system exposure to asset failure due to poor condition and analyzing the impact to reliable performance due to equipment that is obsolete and cannot be maintained or replaced in a timely and cost-effective manner.

- Evaluating alternatives for a poor performing circuit which includes determining the anticipated cost per saved customer minute of interruption.

- Analyzing the interconnection requirements for load and/or distributed energy resource ("DER") and determining the electrical infrastructure design and operating requirements to maintain safe, reliable service for all customers.

- Determining the impact of the project on equipment operation and aging which impacts the ability to continually provide safe reliable service at a reasonable cost over the equipment useful life.

**Q. In addition to the focus on reliability, how does the Company account for environmental impacts at a system level?**

A. As discussed in the 2020 LCIRP Supplement, Eversource Energy has set an aggressive greenhouse gas emissions reduction target of carbon neutrality by 2030. This initiative informs Company policies including reduction of company-use energy consumption and greenhouse gas emissions from its assets and operations. This is in addition to work the Company is doing to interconnect clean, renewable energy into New England through offshore wind, solar and other initiatives. The Company also sources materials and equipment that adhere to environmental best practices and comply with environmental regulatory requirements.

**Q. How does the Company take environmental, economic and/or health impacts into account on a project-by-project basis?**

A. The Company takes these impacts into account in a variety of ways on a project specific basis, where appropriate. As we discuss below, projects that require the Company to replace in-kind equipment due to aging or failing assets are often not

subject to increased analysis because the options for these projects are limited and/or subject to time constraints (to ensure that reliability objectives are met). Where a project-specific analysis is appropriate, the Company has worked to develop formal, objective methods for performing this analysis.

The Company's non-wires alternative ("NWA") framework is an example of an analysis that applies to all suitable projects where the cost of the identified traditional solution exceeds $3 million. The NWA framework provides an analysis tool for considering environmental impacts associated with the potential solutions by evaluating solutions that can avoid infrastructure projects and thereby avoid environmental impacts (e.g., impacts to wetlands). It further provides the ability to provide a comparison of global CO2 emissions for certain technologies that target local consumption or produce locally, such as rooftop solar. This framework uses emissions factors for energy procurement through the ISO generation mix and is being built out to include the ability to calculate avoided emissions from other pollutants and the ability to change emissions factors as needed. The emissions calculations in the new program are rarely used currently because most projects are not expected to impact local emissions but the calculations are available to consider emissions impacts or savings, when appropriate.

Section III of our testimony also provides an overview of the advanced forecasting and modeling frameworks that the Company is working to integrate into its

planning process. This advanced forecasting and modeling framework did not exist at the time that the 2020 LCIRP was developed; however, it has been integrated into planning on a going forward basis.

**Q. With respect to environmental impact analysis, the Company's rebuttal testimony referenced a "decisional matrix." Please describe when this decisional matrix is used?**

A. The decisional matrix is a document that the Company uses to evaluate project options. The Company has typically included portions of this analysis in its project evaluation determination. However, the decisional matrix was updated in early 2022 to include detailed reasoning for project ranking. An example of a recently completed decisional matrix is included with the Supplement as Appendix C, pages 1-2. The decisional matrix was used to evaluate the options for a project to address asset condition and aging infrastructure at the Resistance Substation. The decisional matrix shows that the Company evaluated four options and considered a range of criteria including environmental impacts associated with each option.

The decisional matrix does not apply to all projects. Similar parameters that apply to the NWA analysis discussed above, apply to use of the decisional matrix. Specifically, where a project has estimated costs of less than $3 million, relates to replacement of aging or failed equipment, or must be completed in less than two years, the Company would not engage in a decisional matrix analysis. Instead, the Company moves quickly when it must replace aging or failed equipment.

However, the Company still determines determine what local, state, and/or federal environmental regulations or requirements would apply (if any).

**Q. How are environmental impacts considered by the Company for purposes of informing its evaluation through the decisional matrix?**

A. All business units across the company are responsible for ensuring environmental compliance with rules and regulations. When a project is appropriate for a decisional matrix analysis, environmental impacts are addressed through the Sustainability and Environmental Affairs Department ("SEAD") within the Company, and initial reviews are done by the Licensing and Permitting ("L&P) Group. For substation or distribution work, the Environmental Remediation Group and the Environmental Response Team will be brought in as needed. The L&P Group is contacted by the project sponsor (a project manager or project engineer) to perform a Project Review. A copy of the Project Review form is included in Appendix C of the 2020 LCIRP Supplement. The L&P team reviews the project scope and completes the Project Review form to determine a high-level timeline for each necessary environmental permit and associated cost estimate. Any project alternatives or alternative routes presented to the L&P team are also be reviewed. In addition, the L&P team presents (when applicable) additional routing alternatives that may help avoid or minimize potential impacts to known habitat, wetlands, and other resource areas. If there is a siting component to the project, SEAD also provides any necessary environmental information to the Company's

Siting Group to support development and route selection.

The Environmental Remediation Group meets with the project engineers to discuss logistics, safety concerns, etc. as they relate to any necessary environmental remediation and regulated materials management for a specific project. This allows the Company to incorporate these issues into its project cost estimates and evaluation. Another example of how the Company considers the environmental impacts on a project-by-project basis is through coordination with the Environmental Field Response Team. This team has oversight for environmental compliance at substations and is responsible for managing any reuse or off-site management of excavated soil located inside a substation and management of other regulated materials (oils, PCBs, asbestos, etc.). The costs and logistics associated with this materials management is another consideration for selection of a project design alternative that may help limit premiums associated with soil management costs or other material handling costs. The Company may also perform a constructability review.

**Q. What is a Constructability Review?**

A. A Constructability Review is a detailed analysis that is performed to inform the project cost estimation for substation projects. This review includes consideration of environmental impacts for all project alternatives relied on by the Eversource estimating group. A copy of a constructability review is provided in Appendix C

of the 2020 LCIRP Supplement.

**Q. How does the Company's project evaluation account for economic impacts?**

A. There are three ways that the Company takes economic impacts into account when it is selecting a project option. First, as discussed above, the Company ensures that all projects will result in a safe and reliable system. Without a safe and reliable electric distribution system, the customers and businesses located in the Company' service territory cannot function in a manner that will allow New Hampshire to remain competitive. Customer expectations regarding reliable service have only been increasing over time as the reliance on the electric distribution system also increases. Providing a reliable electric service is therefore the best way that the Company can support the economy in New Hampshire through creation and retention of jobs.

Second, the Company weighs the costs of each project option with the projected benefits to select the project with the lowest reasonable cost. In reaching this determination, the Company takes the direct costs of the project into consideration as well as the indirect costs that may include the ability to leverage an investment in the future, or the expected lifespan of the project option.

Third, the Company evaluates projects to determine whether the potential solutions will facilitate the transition to a modern grid including deployment of equipment that will allow for higher penetration of distributed energy resource ("DER"),

accommodation of increased demand from heating and transportation electrification, and improved mitigation and adaption to climate impacts. In the same way that a reliable system will ensure that New Hampshire is competitive, a modern electric gird will also ensure that the state is competitive with its neighbors and can support the 21st century economy.

**Q. Lastly, how does the Company's project evaluation account for health impacts?**

A. As an electric distribution company that has divested of its generation assets, the Company's ability to influence health impacts in the State of New Hampshire are limited. The Company does, however, consider whether an investment will enable DER or distributed generation as part of its efforts to avoid or reduce emissions. The Company also evaluates opportunities to incorporate renewable energy, which creates far less harmful air pollutants and reduces GHG emissions as compared to fossil fuel electricity generation. The reduction and avoidance of emissions, generally speaking, has both environmental and health benefits.

However, the Company is able to have a positive impact on the health of New Hampshire customers on a project-by project basis by considering whether project solutions will enable DER and/or distributed generation. Enabling DER and/or distributed generation has the potential to similarly avoid or reduce emissions, which also can reduce human health impacts. Specifically in the NWA Tool discussed above, the Company has the ability to compare global CO2 emissions.

Lastly, there are direct, positive health impacts through provision of safe and reliable distribution service. A safe and reliable system means that health and emergency response facilities are able to operate consistently. A safe and reliable system also ensures that customer-owned heating and cooling systems operate even during peak demand periods.

## III. SUPPLEMENTAL INFORMATION IN RESPONSE TO OCA AND CENH

**Q. Did CENH provide any clarification regarding its direct testimony at the technical session held on October 5, 2022?**

A. Yes. CENH clarified that it was not suggesting in its direct testimony that the Company should have complied with orders that had not been issued prior to the filing of the 2020 LCIRP. Instead, CENH stated that its testimony was intended to convey that there were open proceedings before the Commission that the Company was aware of and should have been accounted for in the 2020 LCIRP.

**Q. Does the Company agree with this recommendation by CENH?**

A. The Company does not agree that its 2020 LCIRP was deficient or requires modification. However, the Company does agree that the electric distribution grid is undergoing a transition that will need to be addressed in future LCIRP filings. In the two years since the filing of the Company's LCIRP in October 2020, policy objectives and initiatives have continued to evolve as utilities, the Commission, and stakeholders engage to determine how best to facilitate the transition to more renewable energy, grid modernization, electrification, etc. With the benefit of

dockets that are now further along or that have concluded since October 2020, the Company's next LCIRP filing is expected to represent this significant shift. This is why the Company has suggested in its rebuttal testimony that a working group should be convened ahead of its next LCIRP filing; this working group would allow for collaborative consideration of how the next LCIRP should be structured to address this shift.

Below the Company provide examples of how it has started to address this transition.

**Q. Has the Company begun the process of incorporating the impacts of the grid transition into its planning?**

A. Yes. The Company is making adjustments to its forecasting and modeling that reflect this transition. The Company is focusing on analyzing long term developments in electrification and its impact on the grid. A process to efficiently combine load forecasts with system planning models is being developed and implemented. The Company's Massachusetts affiliate NSTAR Electric Company d/b/a Eversource Energy ("NSTAR Electric") is also investing heavily in automation of the planning processes; these automation investments are expected to provide benefits to the New Hampshire service territory once complete.

**Q. Please describe the changes that the Company is undertaking with respect to forecasting.**

A. The Company is making changes to its forecasting methodology that will account for electrification impacts across its service territory thirty years out into the future. This will allow the Company to design projects that are needed today in a manner such that the projects can be leveraged to achieve long-term projections. The capabilities associated with this advanced forecasting include heating potential analysis, electric vehicle impact assessment, and solar modeling (rooftop and ground mounted).

NSTAR Electric has already started to use this advanced forecasting. This advanced forecasting includes two key changes: (1) identification of system constraints over the next ten years to allow sufficient lead time; and (2) converting policy objectives into electric demand at a feeder and station level. As part of these changes, the Company and its affiliates have begun developing forecasts specifically for electric vehicles, solar, heat pumps, and decarbonization goals (e.g., NSTAR Electric has developed a forecast that reflects the Massachusetts 2050 decarbonization goals). This advanced forecasting will be performed by the newly established Eversource Energy "Advanced Forecasting and Modeling Team" as part of the System Planning Group. This advanced forecasting and modeling began with the NSTAR Electric service territory in Massachusetts, but the Advanced

Forecasting and Modeling Team will serve all three states in which Eversource Energy operates, including New Hampshire.

**Q. Has NSTAR Electric applied this advanced forecasting to any projects?**

A. Yes. NSTAR Electric applied this advanced forecasting to a proposed substation project in its Massachusetts service territory called the East Cambridge substation. The analysis performed for that project was able to account for electric vehicles, residential heat pumps, and solar PV hosting capacity at rates that were consistent with the Massachusetts policy objectives.

NSTAR Electric Company has also proposed to implement an Electrification Framework as part of its proposed performance based ratemaking plan in Massachusetts. The Electrification Framework is a commitment that would require the Company to plan projects over $20 million to ensure that these projects will enable Massachusetts electrification objectives. Lastly, the Company will be using its advanced forecasting capabilities to support filings to the Massachusetts Grid Modernization Council, which is part of House Bill 5060. The Company expects to be able to leverage the experience of NSTAR Electric as it incorporates this advanced forecasting into its next LCIRP.

**Q. Please describe the modeling changes that the Company and/or its affiliates have begun implementing since the filing of the 2020 LCIRP.**

A. The Company has begun moving to a time series analysis (allowing the evaluation of distribution assets over every hour of a forecasted year as opposed to a single worst case scenario) both for DER interconnection and system planning. This will have impacts on how the Company studies interconnection and evaluates long-term solutions. The Company's proposed East Cambridge Station also used a full annual time series analysis for the first time.

**Q. Is the Company making any improvements or changes to its customer information systems as they relate to planning?**

A. Yes, the Company has been investing in tools that will facilitate interconnection. The New Hampshire hosting capacity maps are expected to go live in the next six months. In addition, NSTAR Electric uses a tool called "Gridtwin" in Massachusetts that allows property searches for solar developers in combination with NSTAR Electric's hosting capacity maps and interconnection cost estimates. This tool is planned to be deployed in New Hampshire in 2023.

The Company is also working on attaining capital funding to deploy the Advanced Load Forecasting capabilities through LoadSeer[1] in NH in 2023.

[1] https://integralanalytics.com/index.php/products/loadseer/

Also expected to be in service by the end of 2023, is a new tool that the Company is deploying that will enhance the interconnection application process while also enabling a more efficient use of DER data for inclusion in system planning studies.

Lastly, the Company is working on improvements to the hosting capacity information (e.g., load hosting capacity for electric vehicle chargers) that will be rolled out over the next 2-3 years. Some of these improvements will first be tested through the grid modernization efforts that have begun in Massachusetts and then deployed to New Hampshire. This is another example of an improvement where the Company will be able to leverage the experience of its affiliate.

## V. CONCLUSION

**Q. Has the Company complied with the requirements of 378:39?**

A. Yes. RSA 378:39 is a statutory provision that sets forth how the Commission should review LCIRPs and requires the Commission to consider the potential environmental, economic and health-related impacts of each proposed option. The Company's 2020 LCIRP together with this supplement has provided sufficient information to inform this analysis by explaining how the Company accounts for each of these impacts in its planning and decision-making processes.

**Q. Has the Company started to account for the electric grid transition in its distribution system planning process?**

A. Yes. In the time since the 2020 LCIRP was filed, the Company has begun to

account for the electric grid transition through advanced forecasting, modeling, and interconnection tools that will facilitate DER. These advances address the initiatives and dockets that were referenced by OCA and CENH in their testimony and that the Company expects to address these changes in the next iteration of its LCIRP. The working group recommended by Eversource in its rebuttal testimony is the appropriate forum for additional consideration of this electric grid transition and how best to account for it in the next LCIRP.

**Q. Does this conclude your testimony?**

A. Yes, it does.

EVERSOURCE



# 2020 LCIRP Supplement

## STATUTORY FRAMEWORK

Pursuant to RSA 378:39, the Commission is directed to:

> [R]eview integrated least cost resource plans in order to evaluate the consistency of each utility's plan with [RSA 378:39], in an adjudicative proceeding. In deciding whether or not to approve the utility's plan, the [C]omission shall consider potential environmental, economic, and health-related impacts of each proposed option. The [C]omission is encouraged to consult with appropriate state and federal agencies, alternative and renewable fuel industries, and other organizations in evaluating such impacts. The commission's approval of a utility's plan shall not be deemed a pre-approval of any actions taken or proposed by the utility in implementing the plan. Where the [C]omission determines the options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts, the following order of energy policy priorities shall guide the [C]ommission's evaluation: I. Energy efficiency and other demand side management resources; II. Renewable energy sources; III. All other energy sources.

As an electric distribution company, the Public Service Company of New Hampshire d/b/a Eversource Energy (the "Company") has an obligation to provide safe and reliable electric distribution service to customers at a reasonable cost. The Company views this obligation as the starting place for all planning decisions. The Company considers several factors when evaluating the reliability benefit of project alternatives that are discussed in more detail in the testimony accompanying this supplement. The provision of safe and reliable distribution service at a reasonable cost has environmental, economic and health-related benefits for the residents of New Hampshire. The outcomes are discussed below.

### I. Environmental Impacts

The Company addresses the environmental impacts of its distribution system and services through a number of initiatives and assessments. At an enterprise level, the Company has set an aggressive greenhouse gas emissions reduction target of carbon neutrality by 2030. To achieve this goal, the Company is working to address line loss, reducing methane emissions through its gas distribution infrastructure, upgrading its facilities to reduce electricity and fuel consumption, adding electric and hybrid vehicles to the Company's fleet, and adopting innovation solutions to replace the use of sulfur hexafluoride in electric equipment. The Eversource Energy Climate Adaptation and Mitigation Plan (the "CAMP") is attached to this supplement as Appendix A. The

EVERSOURCE



CAMP was developed in response to a Massachusetts electric docket, and although the focus is on those projects, many of the same programs and processes are being used in New Hampshire. As detailed in the CAMP, Eversource Energy is also engaged in providing solutions to bring clean, renewable energy to New England; hardening its systems to withstand the impacts of climate change and respond quickly when those impacts occur; and engaging with stakeholders to provide energy efficient solutions for customers and communities to ensure a just climate future.

Eversource Energy reports on its progress in meeting its emission reduction and other environmental goals through its annual sustainability report that is released in or about July of each year. The 2021 Sustainability Report is attached to this supplement as Appendix B.

As part of these enterprise-wide initiatives, the Company sources materials and equipment that comply with the latest environmental requirements and guidance. The Company also looks for innovative ways to upgrade its equipment (e.g., piloting the replacement use of sulfur hexafluoride in certain electric equipment).

On a project-by-project basis, the Company takes more specific impacts into account related to routing and site selection (e.g., wetlands, cultural resources, habitat, etc.), community impacts (e.g., including in environmental justice communities), and enabling a clean grid (e.g., planning to meet future needs). These project-by-project impacts are considered in a few different ways and at different points in the project evaluation process.

One way the Company has begun to consider enablement of a clean grid is through its transition to advanced forecasting and modeling frameworks that allows the Company to account for electrification of vehicles and heating systems. These advanced forecasting and modeling frameworks allow the Company to consider whether a potential solution will meet not just an immediate need, but a projected future need. This reduces the risk that a selected project will use equipment that becomes obsolete prior to the end of its useful life; this is an important consideration as technologies and policy objectives continue to evolve.

The Company also has a non-wires alternative ("NWA") framework that it has provided in this proceeding. As set forth in the Company's rebuttal testimony, the NWA framework is applied to any project where the cost of the identified traditional solution exceeds $3 million. This threshold is necessary because an NWA can be costly and would only constitute a more cost-effective solution where the costs of the traditional solution are within the same cost range. However, where an NWA framework is appropriate, it can provide an additional alternative when analyzing environmental impacts associated with the potential solutions to an identified need. NWA analysis is also used to avoid infrastructure projects thereby avoiding certain potential environmental impacts (e.g., impacts to wetlands).

After the project need has been identified, the impacts associated with each potential solution can be considered using the Company's decisional matrix. An example of a recently completed decisional matrix is attached to this supplement as Appendix C. As shown in Appendix C, the

decisional matrix allows the Company to consider the environmental impacts of each solution and to assign a score to these impacts that becomes part of the solution rankings. As part of the development of the decisional matrix for substation projects, the Company may also complete a constructability review that is used to estimate the costs associated with each solution. A copy of the constructability review template is included as part of Appendix C. The constructability review is performed as part of the conceptual engineering activities. This constructability review also must account for certain environmental impacts, including the need to conduct remediation, in order to inform the cost estimate. Distribution and transmission projects also include a project review that is completed by the Licensing and Permitting Group. A copy of the project review is also included as part of Appendix C.

## II. Economic Impacts

The Commission has indicated that a measure of economic impacts is creation of jobs.[1] As an electric distribution company, Eversource is a major supporter of the New Hampshire economy including retention and creation of jobs by providing safe and reliable electric distribution service. Customer expectations regarding reliable service have been increasing over time as customer reliance on electric distribution service also increases. These expectations will only continue to grow as customers electrify their heating systems, increase purchase of electric vehicles, and engage in a hybrid working environment where customers work from their homes. In order to support a competitive economy that can maintain a work force, it is imperative for New Hampshire to have reliable electric service.

As discussed above, providing safe, reliable and cost-effective electric service is the overarching objective of the Company's distribution system planning. Ensuring that each option considered for an identified need will meet this objective is a baseline consideration by the Company. Therefore, the best measure of the Company's economic impact is the reliability of its distribution system.

In addition to its focus on a reliable system, the Company is committed to facilitating the transition to grid modernization. This includes deployment of equipment that allows interconnection by DER and energy storage. A modern electric grid in New Hampshire will ensure that the state is competitive with its neighbors in other New England states that are similarly facilitating adoption of advanced grid modernization and clean energy technologies.

## III. Health Impacts

The third category for consideration under RSA 378:39 is health impact. Following

[1] Docket No. 19-126, Order No. 26,664, at 15 (August 8, 2022) (directing Northern Utilities to estimate direct jobs created but noting that Northern Utilities should not perform its own economic analysis or develop a complex model).

EVERSOURCE

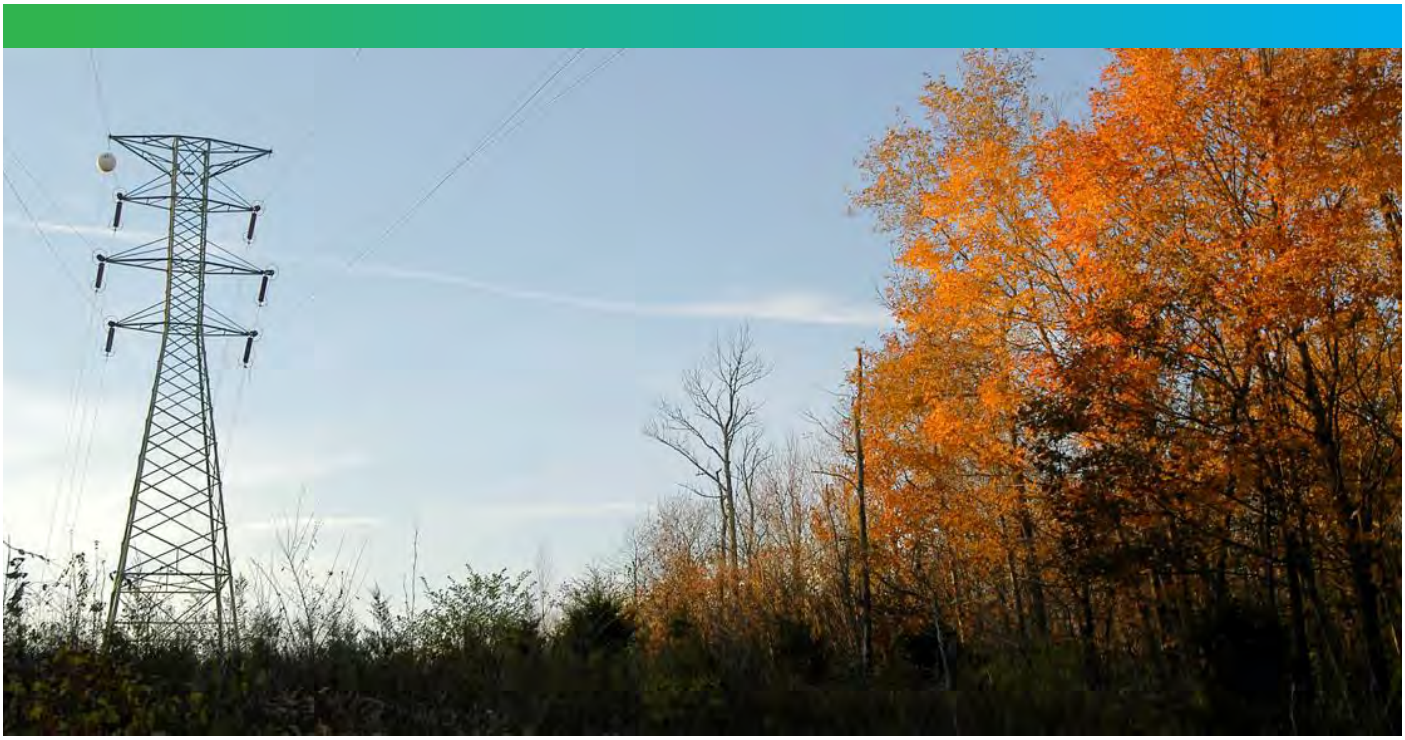


divestiture of the generation function, the Company's direct impacts on health through emissions has decreased. The Company is no longer permitted to own generation and provides supply directly to customers on a limited basis through its default service option. This default service option is competitively bid to ensure that least cost default supply is procured on behalf of customers. As described in Appendix A of the 2020 LCIRP, the ISO-NE wholesale market for electric generation is presently dominated by natural gas but is continuing to shift toward less carbon-intensive sources. The Company continues to monitor this mix and evaluate the best options for procuring least cost, reliable supply on behalf of its default customers.

The Company does, however, consider whether an investment will enable DER or distributed generation as part of its efforts to mitigate or reduce emissions. The Company also evaluates opportunities to incorporate renewable energy which creates far less harmful air pollutants for generating electricity. In these ways, the Company is mitigating GHG emissions which can also have impacts to human health.

In addition, the Company's commitment to ensuring reliability service has direct, positive health impacts. Reliable distribution services ensures that heating and air conditioning equipment function to protect customer health, including the Company's most vulnerable customers. Reliable distribution service also ensures that health facilities and emergency shelters in the state of New Hampshire are able to provide necessary services. Lastly, reliable distribution services protect customers who rely on medical equipment including life support.

# Eversource Climate Adaption and Mitigation Plan



EVERSOURCE

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# Introduction

At Eversource, we recognize that climate change is one of the greatest challenges facing the globe and that timely action and innovative solutions are vitally important. The impacts of climate change are already affecting our business. We have made great progress implementing measures to strengthen our infrastructure and working with our stakeholders to ensure we are collectively prepared. We must remain focused on preparing for and responding to more frequent and more severe weather events, protecting our ability to deliver essential services to our customers. At the same time, we are in a unique position to help mitigate climate change through aggressive emission reduction measures from our own operations and beyond. In support of our region's goal to realize a low-carbon future, we are proud to serve as a catalyst for clean energy to lower regional emissions from the electric, space heating and transportation sectors, and to serve a critical role in achieving aggressive state climate goals. And we are leading by example when it comes to reducing greenhouse gas (GHG) emissions from our operations, making a corporate commitment to be carbon neutral by 2030.

## This Climate Adaptation and Mitigation Plan (Plan) is focused on four key areas:

1. Providing solutions to bring clean, renewable energy to New England.
2. Reducing our own GHG emissions with a commitment to be carbon neutral by 2030.
3. Hardening our systems to withstand the impacts of climate change, and to respond quicky when impacts occur.
4. Engaging all stakeholders, providing energy efficient solutions for our customers and communities, and ensuring a just climate future.

This Plan represents a snapshot of our current efforts to further reduce our impact on climate change, enhance our system resiliency and engage our stakeholders as we adapt to a changing climate. We have adopted commitments both to reduce greenhouse gas emissions from our operations — and metrics designed to track that reduction — and to invest in clean energy that support regional emission reduction targets.

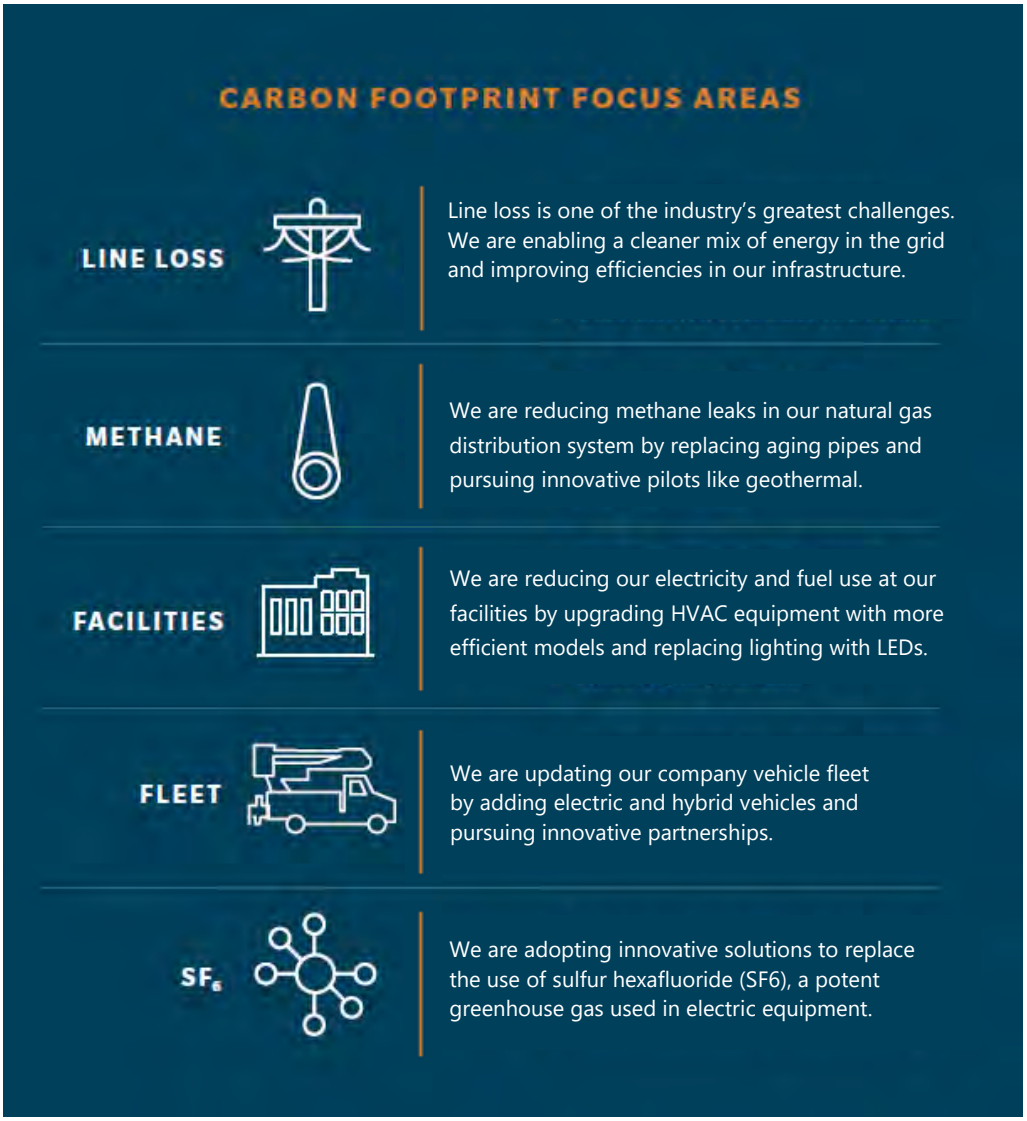
## Support of State and Federal Climate Plans

We are working closely with the states we serve to support action being taken to reach aggressive GHG emissions reduction targets and are engaged and executing strategies in Massachusetts, Connecticut and New Hampshire to reduce GHG emissions and adapt to the changing climate. We also participate in industry review of federal climate laws and support both national and international programs addressing climate change.

# Reducing Our Impact on Climate Change

## Carbon Neutrality Target

One of the most important initiatives we have in place to reduce our impact on climate change is an industry-leading target to ensure our operations are carbon neutral by 2030. We are focused on achieving our goal by reducing emissions in five key operational areas.



- Line Loss

  The energy lost when power is transmitted and distributed across the grid is one of the electric industry's biggest challenges for emissions reduction. Collaborating with state and regional efforts to enable a cleaner mix of energy within the grid is the most effective way for us to address this issue. We are also implementing distribution infrastructure projects to interconnect distributed energy resources (DER) projects and to replace inefficient distribution transformers that will enhance system efficiency.

- Methane

  We continue to reduce methane emissions within our natural gas service territories in Connecticut and Massachusetts by replacing aging bare-steel and cast-iron natural gas pipelines to enhance safety and minimize the release of methane emissions into the atmosphere. We are also pursuing opportunities to incorporate long-term solutions to decarbonize the natural gas product for our customers. Projects we are investigating include the use of renewable natural gas and hydrogen, and leveraging our natural gas assets in the future for potentially integrating renewables. We are working with our states as they evaluate electrification strategies targeted at the heating sector and we are piloting a networked geothermal project to provide heating and cooling for a grid of interconnected customers.

- Facilities

  We continue to pursue aggressive strategies aimed at reducing electricity and fuel use at our facilities. We are evaluating and upgrading HVAC equipment with more efficient models including electric heat pumps. Our successful efforts to replace energy-intensive lighting with LEDs at our facilities has now been expanded to target Columbia Gas facilities, which we acquired in 2020. We are implementing measures to lower our energy use with control system upgrades and space optimization, improve building envelopes, and utilizing renewable energy when feasible.

- Fleet

  A key focus for our fleet operation is the drive to reduce emissions from fuel consumption. We continue to adopt hybrid vehicles and alternative fuel sources as substitutes for diesel and gasoline, such as biodiesel and compressed natural gas. We have also established partnerships with vendors developing innovative technologies, such as AltecJEMS® and XL Fleet, that specialize in emission-reducing tools and technology to help reduce idle time and improve fuel efficiency.

- $SF_6$

  We have made great progress in reducing sulfur-hexafluoride ($SF_6$) emissions from our existing electric equipment through strong maintenance practices and the successful implementation of a detailed $SF_6$ tracking and inventory program. We are working with industry partners to research and test solutions to reduce the dependency on $SF_6$ as an insulator in high voltage electrical equipment, which includes piloting $SF_6$-free equipment. In anticipation of near-term alternative insulating gases becoming available, select new equipment is being designed to accommodate these alternative non-$SF_6$ insulating gases.

## Enabling a Clean Grid

We are investing in our infrastructure to continue delivering reliable energy to our customers and enable the integration of clean energy resources. We are proactively planning our transmission and distribution solutions to meet future needs, including making cost-effective system upgrades when we undergo reliability improvements that will allow for future integrations of clean energy. By finding these opportunities today, we can optimize the grid in the near term while enabling climate benefits and cost savings in the longer term.

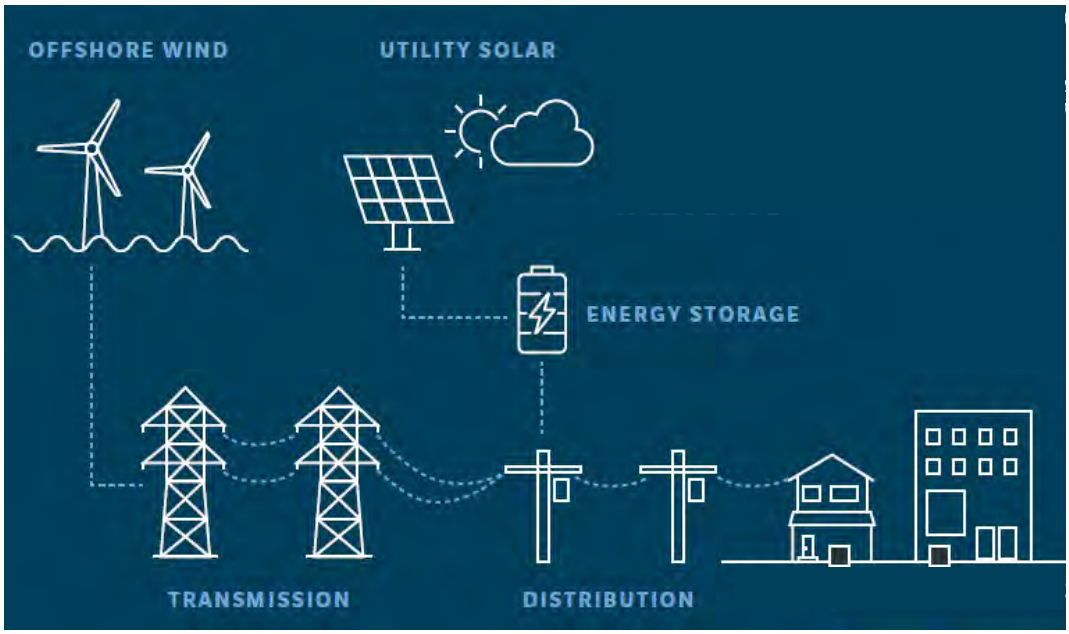
Transmission and distribution of electricity plays a key role in meeting reliability and clean energy goals. A strong, well-connected transmission network delivers power from the point of generation to where it's most needed and can allow for an optimized mix of energy sources — depending on what is most available and economical. Doing so can enable New England to tap energy sources as advantageously as possible.

We continue to bolster the reliability of the regional electric system with strategic initiatives. Improvements include upgrading utility poles, wires and other equipment to make the grid more resilient to New England's increasingly unpredictable weather.

Although connecting a large amount of clean energy resources to the grid poses a significant challenge, it's one we have addressed through our comprehensive transmission planning process. In order to meet the clean energy targets of our states, the region will require:

- Substantial growth in offshore wind and solar.
- Dramatic increases in electric vehicles (EVs) and cleaner heating sources.
- Energy storage solutions to provide essential back-up power to intermittent resources.
- Energy efficiency to help balance the load on the grid.

Unlocking a clean energy future in New England requires collaboration and open dialogue with all stakeholders involved in our projects. Planning, permitting, siting and building infrastructure is complex. By working transparently with our partners and providing comprehensive outreach to our communities, we are well positioned to modernize the grid to support new clean energy resources in the timeframe needed.

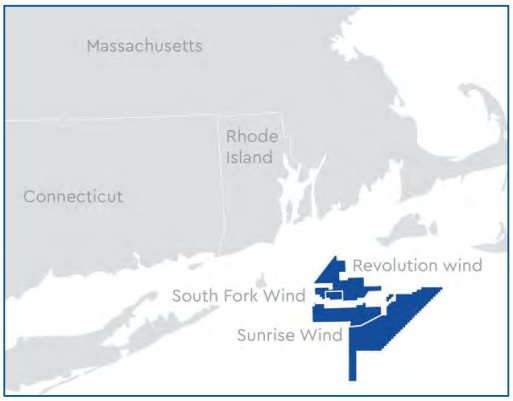


## Offshore Wind

Along with our partner, Ørsted, the world's leading developer of offshore wind, we are actively supporting the development of several offshore wind projects in the Northeast that will soon help enable a cleaner energy future for the region. Projects under active development include our South Fork Wind, Sunrise Wind, and Revolution Wind projects, that will all be built within our existing 257 square-mile lease area off the coast of Massachusetts and Rhode Island. Together, these projects will serve New York, Connecticut and Rhode Island, providing more than 1,760 megawatts (MW) of clean, renewable energy — enough to power more than 1 million homes.

Each of these projects will play a critical role in helping states throughout the region meet their ambitious clean energy goals while also reducing harmful emissions by a total of nearly 3 million metric tons annually, the equivalent of taking more than 630,000 cars off the road. As we look to the future, we are also continually evaluating additional opportunities to expand our commitment in partnership with states throughout the Northeast. We already have the ability to more than double our commitment to offshore wind within our existing lease areas – providing enough clean, renewable energy to power up to 2 million homes.

In addition to our own projects, many additional offshore wind projects in New England are planning to interconnect to our transmission system. Currently, two projects with a combined nameplate rating of 1,600 MW are proceeding through the Independent System Operators of New England (ISO-NE) Tariff interconnection process to interconnect to the Eversource transmission system on Cape Cod. One project has an executed interconnection agreement and the other is progressing toward a final, executable interconnection agreement. A significant portion of the over 17,000 MW of other offshore wind generators in the ISO-NE interconnection queues are also planning to interconnect to Eversource transmission facilities.




*Eversource and Ørsted Offshore Wind Lease Areas*

## Solar

We currently own and operate 70 MW of solar across our Massachusetts electric territory. Recent legislation has expanded utility solar ownership opportunities for both electric and gas companies and we have a dedicated team overseeing these initiatives. Under this new authorization, we are partnering with the communities we serve to develop, own and operate solar projects paired with energy storage to improve community climate resilience and reduce peak demand.

We also manage solar incentive programs across all our territories including the SMART program in Massachusetts. These programs are designed to support the development of photovoltaic systems that both lower energy costs for participating customers and support state climate goals. To date, more than 100,000 Eversource customers have installed over 1.8 gigawatts (GW) of customer-sited solar. We also work proactively to support policies in our states that will enable sustained solar market growth through long-term system planning and cost-effective investments.

## Energy Storage

We are advancing renewable energy by piloting energy storage projects offering benefits consistent with the objectives of grid modernization and climate adaptation. In addition to applications that accommodate the growth of distributed generation and facilitate important policy objectives, energy storage can be deployed as an alternative to traditional distribution solutions in some circumstances. The potential use of energy storage — as an asset in a standalone configuration or in combination with solar or other energy sources — may provide opportunities for increased reliability and resiliency in the event of severe weather and grid outages. These "microgrid" opportunities are typically location-specific and require technical and economic analysis to prove the feasibility of these solutions.

# Building Resiliency

Climate change is already impacting our region with more frequent and intense storm events, storm surges along coastal areas, and summer heat advisories. We are focused on strengthening our transmission and distribution systems and infrastructure to mitigate these adverse impacts of climate change. We have also enhanced our emergency response plans to best support our customers and communities when events occur. Resiliency can be defined as the ability to reduce the magnitude and/or duration of disruptive events. Our efforts are focused on the following resiliency pillars:

### Prepare

- Developing continuity, contingency and strategic plans.
- Training employees and exercising plans.
- Establishing mutual aid agreements.

### Mitigate

- Hardening, strengthening and retrofitting equipment.
- Ensuring backup generation and fuel storage are available.
- Developing system redundancies.

### Respond

- Implementing real-time feeder switching.
- Coordinating energy system assets and emergency response.
- Communicating with stakeholders.
- Deploying mobile incident management and command centers.

### Recover

- Prioritizing access to critical equipment.
- Executing agreements with material providers and contractors.
- Critiquing implemented plans to promote continued improvement.

Additional details on resiliency planning efforts follow.

## Hardening of Infrastructure/Asset Management

Risks related to climate change include the physical risk from severe storms and increases in sea levels due to increased global temperatures, changes in precipitation and extreme weather events. We have developed a robust resiliency plan to improve our system's ability to withstand severe weather patterns, which includes installing new and stronger infrastructure (utility poles, wires and related system equipment) and enhanced year-round tree trimming.

We are reinforcing existing critical facilities to withstand storm surges while future substations are being "flood-hardened" to better protect against storm surges associated with the increasing risk of severe weather. We began developing a long-term substation flood mitigation strategy in 2020 by examining predictive modelling methods to better assess flooding risk to substation infrastructure. Use of this data will aid real-time operational decisions prior to a storm event and are a reference for future electrical system planning and substation asset strategy and design.

Solutions we use to harden infrastructure include:

- Reconductoring in areas with dense tree-cover.
- Fully insulating express circuits via aerial cable installations to maintain alternate feeds during storms.
- Installing steel poles in critical rights-of-way.
- Targeted undergrounding in areas with dense tree-cover where multiple circuits would be affected.
- Installing automatic reclosers to break up zones or add backup sources.

## Designing Transmission and Distribution Infrastructure for the Future

We are pursuing an integrated and proactive planning approach that leverages regional expertise. A scenario-based approach to transmission planning looks at the possible mixes of future power generation sources and load to determine optimal approaches. We are focused on projects that address public policy goals, enhance interconnectivity and resiliency, and increase market efficiency.

To successfully build a modern grid that reliably delivers clean energy, a long-term, proactive planning process is essential. We are undertaking detailed analyses of a range of scenarios to understand how to build the grid of the future as generation resources, customer demands and decarbonization policy evolve over the next 30 years. Doing so allows us to implement forward-looking solutions that will cost-effectively improve reliability, support the integration of renewable energy sources and meet projected increases in energy demand. We are also conducting Affected System Operator (ASO) studies to assess impacts on the overall grid impact of distributed solar integration.

We are mindful of the needs and demands of our service territory and — working together with neighboring states and regions — have extensive experience solving location-specific needs with solutions that balance cost, reliability and sustainability. We are also developing tools that will help model future electrification scenarios so transmission can be planned and built as the anticipated increased load materializes. Because proactive planning needs to be comprehensive and remain efficient and agile, collaboration among stakeholders will be essential to achieve clean energy goals.

We build and maintain transmission infrastructure to withstand a wide variety of severe weather conditions and fortify the electric grid by proactively replacing assets before they become damaged. We deploy drones to inspect infrastructure where access is difficult to safely and quietly identify issues that might otherwise go undetected. We then prioritize replacement of aging wood and steel lattice structures with new steel structures capable of withstanding winds of 120 mph or more.

These upgrades improve the grid's resiliency and also facilitate the integration of additional clean energy sources, as the new structures support higher capacity conductors capable of integrating clean energy generation as it comes online. All improvements are completed in partnership with policymakers to develop resiliency solutions that are also cost-effective for our customers.

## Considering Non-Wires Alternatives

We have developed extensive capabilities to screen for a wide variety of non-wires alternatives to improve system reliability and capacity while providing the most cost-effective solution for customers. These solutions include energy storage, solar, demand response and local generation (such as fuel cells). These options can be considered as alternatives to a capacity upgrade once they pass a set of screening criteria and a technical feasibility and benefit-cost ratio analysis. We have published our current framework with regulatory entities in the three states of our service territory. Our stakeholder engagement process gathers input from developers and other third parties to increase our portfolio of options for addressing system needs in a reliable and cost-effective manner.

## Grid Modernization – Technology Innovations

As a catalyst for clean energy initiatives, we support important public policy goals that provide the impetus to modernize the electric grid, including goals to promote energy efficiency, clean transportation, energy-storage deployment, and clean energy resources. We continue to implement innovative technologies to further improve service to customers and lessen or mitigate the impact of outages.

Our distribution grid priorities are focused on:

- Creating opportunities for active engagement with customers and stakeholders in the transition to the grid of the future.
- Enabling the levels of penetration of distributed energy resources required to support meaningful gains in clean energy objectives.
- Allowing for flexibility in timing and approach as technologies and policies evolve.
- Optimizing the use of assets to create value and minimize costs for all customers.
- Supporting fair and equitable allocation of costs and benefits of modernization.
- Complementing the Eversource mission to improve customer satisfaction, employee engagement, community partnerships and clean energy leadership.

Although specific investments in the next ten years will be shaped by advances in technology and prevailing system conditions, we are focused on building a flexible foundation to maximize customer benefits over both the near- and long-term. We also continue to assess and address these trends that will shape opportunities for grid modernization over a ten-year horizon:

- Rapid advances in technology.
- Support for clean energy objectives.
- Threats to the electric power system requiring extreme diligence in physical and cyber security.
- Increased proliferation of distributed clean energy resources.
- Growing complexity of real-time distribution operations.
- Planning uncertainties associated with electric vehicle (EV) penetration and dispatchable distributed energy resources (DER).
- The need to optimize the value of DER to lower costs and reduce carbon emissions.

- Demand for additional high-speed communication infrastructure.
- Challenges associated with aging infrastructure.
- Continued customer demand for safe, resilient and reliable service.

Advanced technology that allows for improved monitoring and control makes it feasible to optimize system operations in real time across varying system conditions. Managing voltage and reactive power flow is becoming increasingly important due to the following opportunities:

1. Ensuring that distribution voltages remain within prescribed ranges and are not fluctuating rapidly as additional DER (characterized by intermittent output) is added to the system.
2. Identifying opportunities for conservative voltage reduction (CVR) to reduce peak demand and energy consumption.
3. Improving system efficiency and reducing line losses through optimized reactive power dispatch to reduce greenhouse gas emissions.
4. Alleviating the voltage and power quality concerns that may otherwise limit the interconnection of new, renewable energy resources through active voltage management and mitigation.

We will continue to seek approval to expand investment in this technology to optimize system efficiency and power quality throughout our service territory.

## Factoring Climate Conditions and Electrification into Load Forecasting

Peak demand forecasts anticipate the maximum amount of energy customers will need. As we experience more extreme temperatures, customers' energy demands are already increasing. This, combined with national and regional policies promoting electrification, has led us to invest in advanced load forecasting and modelling capabilities enabling an annual time series load model for each bulk station across each state we serve.

The scenario forecasting approach being implemented will review the solar adoption rate for behind-the-meter assets using economic modelling and rooftop availability analysis, parcel analytics for adoption rates of ground-mounted meter assets, adoption rates for electric vehicles, GPS data-based driving pattern analytics for charging demand forecasting, sector conversion adoption, and storage adoption rates.

The resulting long-range scenarios will also include changes in load due to expected climate change, such as prolonged heat waves and reduced winter loads.

## Emergency Preparedness

Comprehensive emergency preparedness plans guide our actions in adapting to the changing climate and keeping our communities safe during extreme weather events that may result in significant power outages and damage to physical infrastructure.

High-resolution weather and three-dimensional aerial and ground imagery are used to improve delivery of reliable power in extreme weather by predicting a storm's impact. We also use two Outage Prediction Models (OPMs) developed and issued by the University of Connecticut in all three states we serve, and our weather service provider, DTN, to forecast a storm's impact and proactively pre-stage crews to expedite power restorations. The OPM is a leading-edge approach in the electric industry because it can provide a picture of a storm's anticipated impact up to three days in advance and is updated every six hours.

Outage predictions, along with proactive tree and forest management, help to avoid and shorten the duration of customer outages while also enhancing system reliability. The increased frequency of extreme weather also influences our response restoration planning activities. We continue to evolve our analytics and distribution system automation practices to reroute and restore service to our customers as quickly as possible.

In addition to emergency restoration and support work performed by employees, we have contracts in place with external vendors who may be activated during emergency outage events to provide technical staffing resources to support a safe and effective restoration. Some vendor resources are located within our service territory and can respond quickly while others may need more time to respond as a result of location (i.e., Canada or other states further south and west). Line crews, damage assessment crews, wire guards and other support resources are all available to activate when needed.

## Vegetation Management

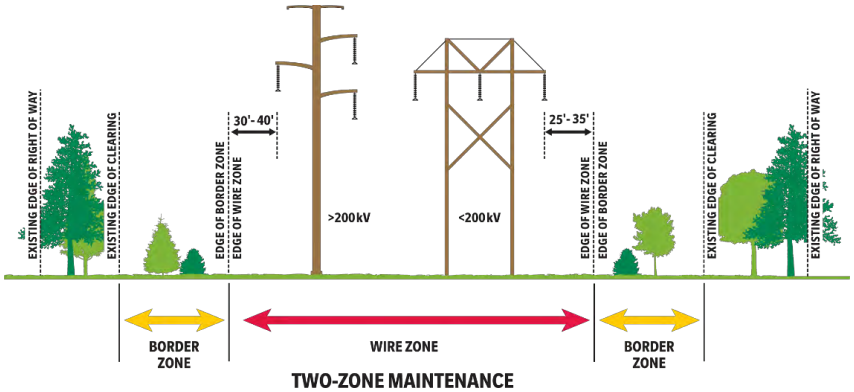
With 90% of outages during storms resulting from falling tree limbs, effective vegetation management plays an important role in protecting our electric system infrastructure from severe weather impacts. In addition to the increased frequency and severity of storms, climate change has also led to irregular periods of drought, compounding the risks trees pose to our electric infrastructure.

From 2015 through 2017, New England experienced lower than normal precipitation that weakened and killed many trees. The primary impact of this drought is damage to the roots, which inhibits water uptake by the tree resulting in leaf wilt, branch die back, and ultimately death of the tree. The secondary effect is a weakening of natural defenses, making the trees more vulnerable to insect pests and disease. For example, gypsy moth caterpillars feed on the leaves of many trees and shrubs and may completely defoliate a tree. In normal conditions, trees recover by putting out new leaves. With successive years of infestation coupled with a multi-year drought, however, the risk of tree mortality increases. Similarly, the Emerald Ash Borer, a non-native insect that infests ash trees, eventually causes mortality in 2-3 years. Unfortunately, this insect has become prevalent and is expected to decimate the population of ash trees in the region. With these climate-induced impacts on trees continuing to be a threat for the foreseeable future, it is important that we take precautions.

Our vegetation management program is an industry-best-practice to meet the need for safe, reliable electric service for our customers while monitoring the growth of forested areas near power lines. Tree trimming and annual maintenance programs mitigate distribution outages by reducing these impacts. Our maintenance cycle is completed every four to five years (depending on location) and incorporates removal of hazardous trees threatening the system.

Working with the Eversource Energy Center at the University of Connecticut, we studied grid-hardening investments for all three states to maximize the reliability of the electrical system while minimizing the impact on roadside vegetation. The methodology we developed considers outage modeling and weather patterns while predicting the effectiveness of different tree-trimming scenarios to reduce weather-related power outages. This research found that although the enhanced tree trimming is focused primarily on a very small percentage of the power lines, the number of outages during storms would have been 10% to 30% higher without it.

We are also engaging tree wardens, municipal leaders, landscape architects and the public to provide examples of the wide variety of trees that can be safely planted near and under utility equipment. Educational Eversource utility arboretums are located in Berlin, Connecticut, at the University of Massachusetts in Amherst, at the Urban Forestry Center in Portsmouth, New Hampshire, and in Hooksett, New Hampshire.



TWO-ZONE MAINTENANCE

# Engaging Our Stakeholders

## Our Communities

### Equity and Environmental Justice

We are committed to recognizing and understanding historical inequities and ongoing disparities of environmental justice populations. We take to heart the importance of fair treatment and meaningful engagement of all people regardless of race, color, national origin, English language proficiency or income, with respect to our business and the energy systems we operate.

To demonstrate our commitment and focus on equity and environmental justice as core to our business, we've named a Vice President of Corporate Citizenship and Equity, who is leading a cross-functional working team dedicated to operationalizing our equity commitment across key business areas, including understanding where community impacts and disparities intersect with necessary work to maintain a reliable energy system. This focus on equity and environmental justice will benefit all customers — and especially those in underinvested and underserved communities.

We are committed to early and sustained communication with community members by conducting open houses to inform and elicit feedback. Recognizing that English may not be the primary language spoken, we make every effort to translate communications into the languages that are widely spoken in our communities.

We are increasing engagement in communities that have historically shown low participation in our energy efficiency programs. These include locations with high proportions of renters, low-to-moderate income customers and those identified as distressed communities.

Additionally, we are focused on delivering reliable energy, which is vital to public safety, community health and the economic welfare of our customers. This results in system enhancements and repairs that have the potential to further benefit environmental justice communities. Our goal is to avoid and mitigate impacts whenever possible. We maintain that these complementary goals — reliability and justice — can be accomplished simultaneously with benefits for all.

### Supporting Communities During Storm Response

Throughout the year, our Community Relations team works closely with municipal leaders to train first responders and identify critical infrastructure, such as hospitals, police and fire stations, 911 dispatch centers, water treatment facilities, and others. These locations are prioritized for service restoration in the event of an outage.

Our Municipal Hub program, developed in 2020, improves communication during emergency events through a two-way, web-based communication and reporting tool designed exclusively for municipal officials, Department of Public Works personnel, police and fire chiefs and their dispatching centers at the local and regional level. The Municipal Hub is available 24/7 and can be used to report outages and incidents while also providing substantive updates and information on the status of an event, the estimated time of restoration and other critical details. The features and functionality of the Municipal Hub improve access to information about outages and restoration statuses for their cities and towns.

Once the Municipal Hub was rolled out to more than 500 communities across our tri-state service territory, a series of virtual live training sessions were held in each state. In-person training opportunities were also provided in addition to computer-based training modules made available for on-demand training.

## Electric Vehicle (EV) Infrastructure

Transportation represents the single largest contribution to our regional GHG footprint. We are working closely with our states and local communities to help reduce the associated emissions within this sector through electrification. Our investment in local grid upgrades to support additional EV charging stations is a significant step forward in promoting the adoption of EVs. As we complete these projects, we maintain a strong focus on supporting equity and environmental justice in the communities we serve.

As an example, we installed charging stations at over 400 Massachusetts customer sites by the end of 2021 (an industry-leading pace of deployment) and expect to fully build out a $55 million dollar allocation with 3,500 public EV charging ports.

As we complete these projects, we maintain a strong focus on supporting equity and environmental justice in the communities we serve, with 19% of EV charging sites installed in these communities, exceeding our goal of 10%.

We are expanding our role in transportation electrification by continuing to build public charging infrastructure and implementing programs that support residential charging and fleet electrification. In 2021, a comprehensive second phase program was proposed in Massachusetts, an expansive nine-year EV program was approved in Connecticut, and a targeted program was proposed in New Hampshire — all of which reflect the region's commitment to partnering with utilities to find solutions for transportation electrification.

In addition to infrastructure programs, we are engaging in other ways with customers, regulators and law makers to support the EV transition, which include specific commercial rates for EV customers, distribution system planning for large fleet customers, a plan to electrify our own internal fleet, and support for regional initiatives, like the National Electric Highway Coalition (NEHC). The NEHC merges the Electric Highway Coalition and the Midwest Electric Vehicle Charging Infrastructure Collaboration and now includes additional participating electric companies from across the country. Currently consisting of 51 investor-owned electric companies, one electric cooperative, and the Tennessee Valley Authority, the NEHC is committed to providing electric vehicle fast charging ports that will allow the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023.

We are also investing in advanced forecasting capabilities, which will allow system planning to model EV adoption over the next decades based on a wide array of parameters — from policy objectives to socio-

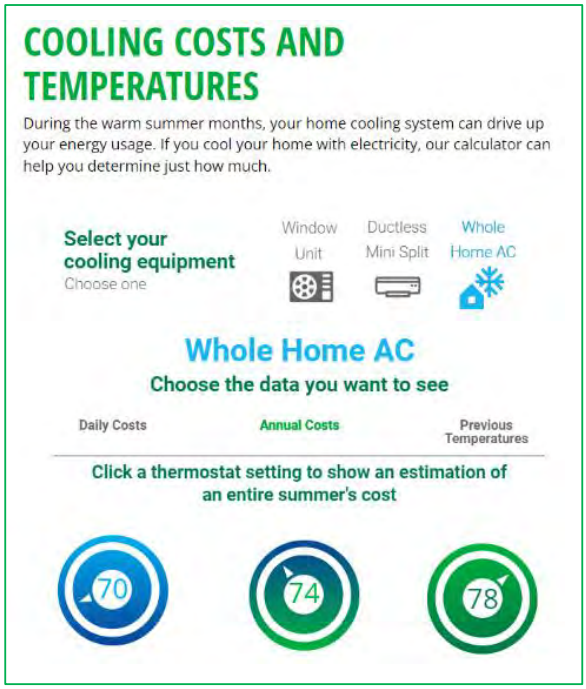
economic impact factors. We have acquired detailed travel data after consultation with the Massachusetts Department of Transportation, which uses the same data sets. These data sets will enable us to extend our understanding of where future EV charging will likely happen, which we will then include in our system planning progress to enable a proactive upgrade of system capacity.

## Our Customers

### Access to Renewable Energy

We are focused on safe interconnection of distributed generation assets with our distribution system. The number of requests to interconnect continues to grow and these assets will result in additional carbon emission reductions as traditionally generated energy is offset by the renewable energy generated. We have also proposed a new community solar initiative to help lower solar access barriers for low-income customers.

### Energy Efficiency




Energy efficiency has been instrumental in halting the rise in emissions from residential and commercial buildings and will continue to play a vital role as decarbonizing energy sources becomes the predominant strategy for reducing emissions across our states. These programs tend to be the most cost-effective ways to help our customers save money, equitably create access to green technology, reduce GHG emissions and create jobs. We take great pride in helping our communities remain vibrant and successful by designing and delivering solutions that are emulated by others across the country.

The multi-faceted advantages of energy efficiency programs are exemplified by the recent success we have seen in Massachusetts. From 2011 to 2020, our energy efficiency offerings generated over $13.1 billion in benefits for customers and we saved over 145 million MMBTUs of fossil fuel usage, avoiding over 2.6 million metric tons of CO2 emissions. We distributed millions of rebates on energy-saving equipment, weatherized approximately 120,000 homes using professional energy services, and created tools like our Cooling Cost Calculator to help residential and commercial and industrial customers better understand and reduce their energy use.

As we strive to implement energy efficiency solutions across our region, we understand there may be economical constraints for some customers. In response, we have created ways for economically stressed families and businesses to participate and benefit from the long-term savings that follow these improvements. We also look to our communities to support this important effort by working with

business partners to pioneer ambitious investments in electrification, with technologies like air- and ground-source heat pumps leading the way.

Additionally, demand response solutions help us manage demand loads, which can reduce construction of new generation plants and lower the use of less-efficient, higher-emissions plants at peak times. These solutions, along with our core efficiency investments, will be a key tool in flattening peak load growth within ISO New England moving forward.

## Employees

### Preparing Our Workforce for Evolving Skillsets

As the utility sector continues to evolve in response to a changing climate, we know we must also ensure our workforce is equipped with the skillset our business will require. Strategic workforce plans are developed annually to identify long-range needs to ensure we acquire, develop and retain diverse, capable talent.

As the industry faces a major depletion of its workforce as nearly half of existing energy workers move toward retirement, we have adapted how we recruit newly skilled employees. Workforce development and employee development programs are aligned to strategic workforce planning to support succession within all levels of the organization, including pipeline development programs that ensure technical skills and competencies for the evolving energy industry. This includes comprehensive programs to train, educate and develop employees.

We also have several established community college partnership programs that feed our craft roles; multiple cohort and rotational programs in Engineering, Transmission, Safety, and other critical areas; and robust internship and apprentice programs. Expansion of these programs is aligned to the business staffing strategies for the next five years and focuses on developing entry-level associates focused on business, leadership and technical skills.

Within our organization, we develop talent and provide career growth opportunities. Employee development programs are offered to train, educate and develop employees at all levels. Our comprehensive key talent program prepares high-potential employees for senior roles and is aligned to strategic workforce planning to support succession within all levels of the organization. The Eversource GOLD program is a 12-month opportunity targeting employees new to the workforce or utility industry. Additionally, tuition assistance programs, paid internships, co-ops and other pipeline development programs help ensure future workforce technical skills and competencies.

### Investors

Acknowledging that many of our existing and prospective shareholders are interested in understanding how Eversource is managing impacts of climate change, we are committed to providing regular and transparent performance updates. We disclose this information through an annual Sustainability Report aligned with globally recognized reporting frameworks and by responding to key sustainability and Environmental Social & Governance (ESG) questionnaires used by our raters.

We provide information to our investors on business risks and opportunities related to climate change that have been identified through our Enterprise Risk Management program. This program routinely assesses climate risk exposures and any associated physical, regulatory, and financial implications. We also disclose opportunities to reduce emissions in our operations and for the region through clean energy investments, energy efficiency programs, and the pursuit of emerging technologies.

## Conclusion

We have made significant progress in our efforts to reduce emissions and ensure a resilient system to support our customers. We will continue to build on these achievements as we identify additional opportunities to mitigate and adapt to climate change impacts.

The work we have in front of us to mitigate our impacts on and adapt to climate change will continue to evolve. As such, this plan will be reviewed and updated as needed. We will also continue to collaborate with stakeholders and policymakers as we do our part to support a transition to a low carbon economy, and as always, remain dedicated to providing safe, reliable and resilient energy for our customers.

For additional information about how Eversource strives to lead our industry in addressing climate change and broader sustainability topics, please visit *www.eversource.com/sustainability*

# Appendix A: Massachusetts Programs that Support Climate Goals and Adaptation

## Support of State Climate Plans

We support programs that pave the way to reach the commonwealth's climate goals through energy efficiency, electric vehicle infrastructure and the development of utility-owned solar and energy storage. The "Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy," passed in March 2021, adopted short-and long-term emissions limits to decarbonize sectors of the economy. As the region's largest energy provider, Eversource is working with other stakeholders to help shape efforts to ensure these goals are achieved.

## Solar

We currently operate 70 MW of solar power facilities, completed between 2010 through 2019. New Massachusetts legislation permits utilities to expand ownership of solar power facilities, and we plan to construct additional solar generation capacity that supports local climate resilience goals. These large-scale solar facilities will directly contribute to Massachusetts' renewable energy installation goal while mitigating peak demand and reducing energy burdens in environmental justice communities.

The Massachusetts "Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy,", authorizes utilities to own and develop 280 MW of solar generation facilities and storage where feasible. Our plans include developing new solar to help meet the commonwealth's commitment to achieve net zero carbon emissions by 2050. As part of this program, we will provide outreach to environmental justice communities.

We also work closely with the Department of Energy Resources (DOER) to support the implementation of the commonwealth's primary solar incentive initiative, the SMART program. Through this program, we expect more than 1,600 MW of new solar to be developed in Massachusetts in the next several years. We have also proposed a new community solar initiative that is currently before the Massachusetts Department of Public Utilities (DPU). This effort will help lower solar access barriers for low-income customers who have not previously been able to benefit from the commonwealth's solar incentives.

We support regulatory efforts to enable more efficient interconnection of customer-owned solar facilities. In response a straw proposal offered in D.P.U. 20-75, we proposed a comprehensive ten-year distribution system assessment to be performed on a yearly basis, that considers infrastructure investment in consideration of clean energy and climate policy objectives.[1] Our system planning proposal is intended to identify optimal infrastructure solutions that can accommodate various types of load growth as well as high penetration of DER to bring broader benefits to customers. The approach involves developing a probabilistic scenario based DER adoption rate and load forecast methodology to

[1] Investigation into Electric Distribution Companies' (1) Distributed Energy Resource Planning and (2) Assignment and Recovery of Costs for the Interconnection of Distributed Generation, D.P.U. 20-75, Initial Comments of NSTAR Electric Company (December 23, 2020), and System Planning Analysis Proposal (April 23, 2021).

evaluate the system's performance and assess the need for substation capacity upgrades over the ten-year planning horizon. Our process allows stakeholders to review and comment on the study methodology, results and reports, and follows fundamental planning principles established by the Federal Energy Regulatory Commission in Order No. 890. We are committed to transparency and a collaborative process to ensure meaningful engagement in our system planning process.

## Energy Storage

The towns of Wellfleet, Truro and Provincetown have experienced more than 15 major outage events over a five-year period, representing over 45,000 customer outage hours. Our assessment determined that the construction of an industry-leading energy storage solution at the tip of the Outer Cape in Provincetown would help to address the system reliability needs of the area and reduce outages by more than 50% for customers in these towns.

In 2018, we began construction of a 24.9 MW/38 MWh lithium-ion battery storage facility that will be capable of providing 1.5 to 3 hours of backup power in summer "peak" conditions and up to 10 hours in the winter, spring and fall (when most of the major outages have historically occurred). The innovative project will also avoid a 13-mile transmission line through the Cape Cod National Seashore.

## Building Resiliency and Technology Innovations

We are investing $189 million in Massachusetts to increase system automation and improve efficiency as part of our work for grid modernization. This includes implementing a Volt-Var Optimization (VVO) project.

The increasing reliance on distributed inverter-based generation to meet demand is causing new challenges for the transmission and distribution system. In periods when distributed solar provides the bulk of the regional supply, transmission operators increasingly require distribution devices to provide voltage and reactive power support. Grouping, monitoring, coordinating and dispatching such assets (capacitor banks, regulators and DER inverters) at a regional level is not feasible today due to the lack of communication and integration between those devices. The VVO system currently operates based on feedback from devices on the circuits, creating an inherently reactive response. Transitioning to a model-based control system enables VVO to proactively address voltage and power reduction.

We have deployed VVO at four stations in Western Massachusetts. Participating feeders represent a diversity of urban and rural areas; residential, commercial and industrial load; and varying levels of DER penetrations. Preliminary results from the VVO deployment at the four stations are in line with our expected reductions in demand (1.8%) and energy use (2.2%). The VVO system is successfully working to flatten and lower voltage profile at the station and feeder level. With coordinated control and feedback from line sensors, VVO enables more flattening (reduced losses) and reduction in voltage (power and energy savings) along the length of the feeder.

## EV Infrastructure

Since approval in November 2017 of the Make-Ready Infrastructure program, we have built expertise, supply chain and channel partner relationships to effectively deploy and scale programs initially focused on building New England's public charging infrastructure. At the time of this report, we have installed

charging stations at over 400 customer sites (an industry-leading pace of deployment) and expect to fully build out the $55 million dollar allocation with 3,500 public EV charging ports.

As we complete these projects, we maintain a strong focus on supporting equity and environmental justice in the communities we serve, with 19% of EV charging sites installed in these communities and exceeding our goal of 10%. We have also partnered with Good2Go, a Boston-based income tiered EV car sharing company to advance the EV experience in moderate income communities. Good2Go has located their EV cars in EJCs in Boston, with a discounted rental rate for income qualified drivers. Eversource supports the installation of EV infrastructure at these locations so the cars have convenient locations to charge in the city, and the cars are located in areas that are easily accessible to their local neighborhoods.

Our investment in local grid upgrades to support additional charging stations is a significant step forward in promoting the adoption of EVs and bringing EV technology to underserved communities.

In 2021, we proposed an expanded EV infrastructure program in Massachusetts focusing on equitable solutions that includes residential charger rebates, managed charging programs for residential and commercial customers, and solutions for fleet infrastructure. We have also introduced several opportunities to further advance equity in the EV infrastructure conversation by proposing pilot programs for Medium-Duty and Heavy-Duty fleets that operate in Environmental Justice Communities (EJC), DC Fast Hubs located in EJCs, and further opportunities to advance EV car and ridesharing programs.

## Emergency Preparation

Recent energy deficiency events and natural disasters around the country have resulted in rolling blackouts in some areas. Climate change and extreme weather events may exacerbate the likelihood of a related occurrence in the commonwealth. As part of our preparedness activities, we are currently working collaboratively with ISO-NE, the Massachusetts Emergency Management Agency, National Grid and Unitil to develop plans and procedures for conducting effective emergency notifications and external stakeholder messaging during an event that requires rolling blackouts.

## Designing Infrastructure for the Future

With the growth of distributed generation in Massachusetts, we are reviewing clusters of distributed generation and are planning distribution and transmission upgrades accordingly. We plan to use this approach with increased frequency to account for the holistic needs of the region (rather than a piecemeal approach) while providing cost savings and reducing local environmental impacts.

On Cape Cod, we're working with ISO-NE to develop an integrated approach to address both reliability demands and future interconnection needs for offshore wind through a proposed 115 kV to 345 kV capacity upgrade and substation investments.

## Environmental Justice & Equity

We recognize the historical inequities and ongoing disparities of environmental justice populations and we are focused on fair treatment and meaningful engagement with all stakeholders. Our Vice President of Corporate Citizenship and Equity is leading a cross-functional working team dedicated to operationalizing our equity commitment across key business areas, including understanding where community impacts

and disparities intersect with necessary work to maintain a reliable energy system. This focus on equity and environmental justice will benefit all customers — and especially those in underinvested and underserved communities.

We are actively engaged with our regulators and state agencies with respect to ongoing improvements to regulations that require enhanced initiatives to address meaningful engagement, evaluating disproportionate public health impacts, and greenhouse gas mitigation in proximity to environmental justice communities. We are an ongoing active participant with regulatory development processes led by the Massachusetts Environmental Policy Act (MEPA) Office and the Massachusetts Department of Environmental Protection (MassDEP) working to advance these important environmental justice initiatives.

One example includes the Mass Save® Community First Partnership, which provides grants of up to $60,000 annually to Massachusetts municipalities and community organizations. These grants help meet the partnership's goals for implementing energy efficiency outreach in their residential and small business communities — particularly those in Environmental Justice communities, including renters, moderate income customers, language isolated customers, and small business customers. To reach these audiences, the program leverages strategic partnership engagement, community based social marketing, and community based participatory research. This effort results in increased energy efficiency program participation and energy savings for customers through completion of energy assessments and installation of equipment upgrades.

The Main Streets energy efficiency program also reflects the focus on increasing building efficiency. The program helps small local businesses reduce their energy costs and environmental impact. Authorized contractors schedule no-cost energy assessments, answer questions about energy-efficient equipment upgrades, and provide some improvements on the spot. Larger improvement projects, such as new HVAC equipment or energy-efficient motor controls, are scheduled for installation at a future date and may qualify for incentives through Mass Save® and interest-free financing to offset the cost of upgrades. Even with updated in-person protocols for the program in 2021, targeted marketing around Main Streets led to nearly 54,000 small and micro businesses contacted, 1200+ assessments completed, and 37 communities serviced over a 6-month span.

We are collaborating with DPU and a diverse group of stakeholders to evaluate the future of natural gas, considering all pathways and how they will affect reliability and social and environmental justice. Our electric vehicle and renewable energy programs also prioritize support of environmental justice communities as described below.

## Access to Renewable Energy

We are streamlining the process to access renewable energy to better serve our customers in partnership with the Massachusetts Technical Standards Review Group. Guidelines for interconnection are available on our website.

Our approach to cost-effective integration of offshore wind energy into the existing grid is also guiding our approach toward distributed generation in Massachusetts, where we are looking at clusters of distributed generation and planning system upgrades. Distributed generation developers may face challenges connecting to the grid based on the amount of resources in queue and uncertainties around the cost

associated with such interconnections. We are working with the Department to submit infrastructure improvements to enable Distributed Energy Resources in the commonwealth in compliance with D.P.U. 20-75-B Order to enable proactive system capacity upgrades in high distributed generation growth regions. In compliance with the Order, we will also be quantifying the benefits of these infrastructure plans to low-income and environmental justice populations.

## Energy Efficiency

Our energy efficiency programs support efforts such as weatherizing thousands of Massachusetts homes and businesses, offering hundreds of millions of dollars in incentives for green products, creating innovative demand response solutions, and partnering with schools and nonprofits across the state to ensure equitable workforce development.

From 2011 to 2020, our energy efficiency offerings generated over $13.1 billion in benefits for Massachusetts customers. We saved over 145 million MMBTUs of fossil fuel usage, avoiding over 2.6 million metric tons of CO2 emissions. We distributed millions of rebates on energy-saving equipment, weatherized approximately 120,000 homes using professional energy services, and created tools like our Cooling Cost Calculator to help residential and commercial and industrial customers better understand and reduce their energy use.

Given the investment needed for participants to implement energy efficiency solutions, we created ways for economically stressed families and businesses to participate and benefit from the long-term savings that follow these improvements. From 2011 to 2020, we served nearly 200,000 low-income participants through energy efficiency programs, helping everyone in Massachusetts access green technology that saves money and energy.

We are leading the way to bring the latest clean technology to our states in an equitable manner. To do so, we're working with business partners to pioneer an ambitious investment in electrification, with technologies like air- and ground-source heat pumps.

We also offer demand response solutions to help us manage demand loads, which can reduce construction of new generation plants and lower the use of less-efficient, higher-emissions plants at peak times. These solutions, along with our core efficiency investments, created over 900 MW of summer demand savings from 2011 to 2020, and will be a key tool in flattening peak load growth within ISO New England moving forward.

Over the past decade, the commonwealth has created and maintained the nation's top energy efficiency programs. We are proud to be consistently recognized as a leader in energy efficiency by national industry organizations, including the American Council for an Energy-Efficient Economy. Our offers reflect and respond to the way our customers use energy today with a multiyear approach that enables us to help customers plan for the future.

The Sponsors of Mass Save® have submitted to the Massachusetts Department of Public Utilities a three-year electric and natural gas energy efficiency plan for 2022 through 2024 that will provide an estimated $13 billion in benefits to the commonwealth. With this energy efficiency framework, Massachusetts continues to lead the nation through its focus on equity that follows a long-established and successful regulatory pathway providing customers with best-in-class energy saving and bill-reduction tools.

This plan demonstrates how the Program Administrators will provide Massachusetts customers the tools necessary to maintain the commonwealth's leadership position tackling the critical need for greenhouse

gas emissions reductions. Our plan accomplishes this important goal while staying true to our historical mission of helping all residents and businesses reduce their energy usage and manage energy costs, and we look forward to our continued collaboration.

# 2021

# SUSTAINABILITY Report

EVERSOURCE

# About This Report

This annual Sustainability Report covers a broad range of environmental, social and governance topics and has been prepared in accordance with the Global Reporting Initiative (GRI) Standards Core Option. GRI Electric Utility Sector Supplement aspects are prefaced with "EU." We have also addressed the reporting guidance of the Task Force on Climate-related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB).

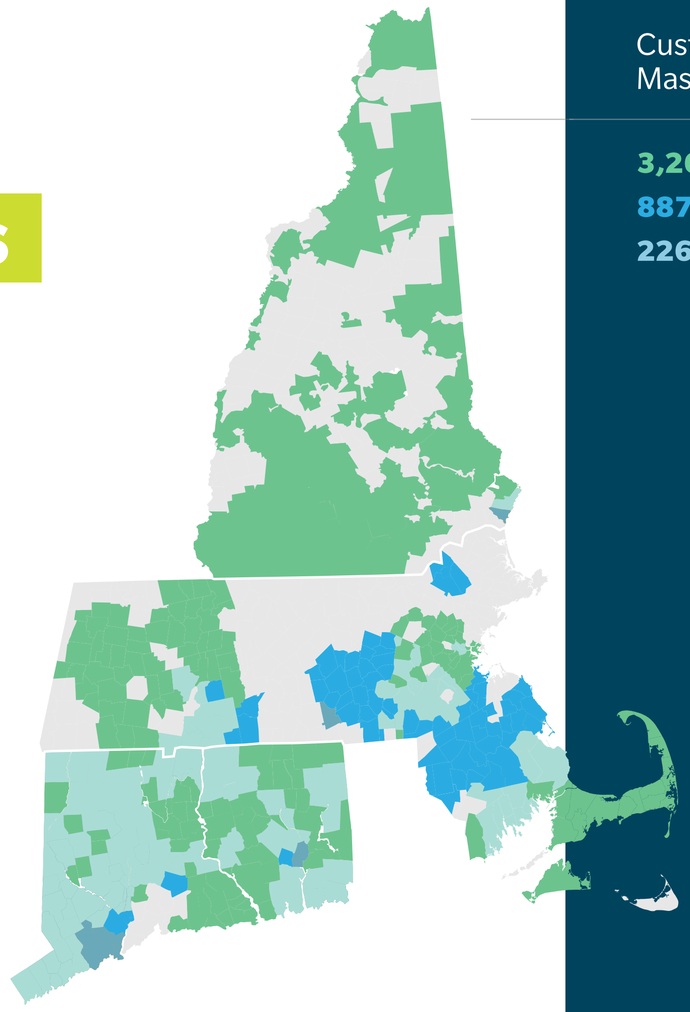
This report describes the management approaches of Eversource's material sustainability topics and provides performance updates for our key sustainability initiatives. The data and information included in this report represent all wholly owned Eversource operations. Our 2021 greenhouse gas (GHG) emissions have been verified by an independent third party in accordance with the ISO 14064-3 standard.

# Serving Our Communities

## EVERSOURCE AT A GLANCE

Eversource Energy (Eversource) is more than 9,200 people committed to the responsible delivery of vital electric, gas and water services to our customers in Connecticut, Massachusetts and New Hampshire. We do this with unwavering focus on safety, reliability, integrity, customer satisfaction and corporate responsibility.

We understand that a clean energy future only works if it's accessible to everyone. We are investing in new infrastructure and innovative solutions to meet the growing needs of our customers and communities to ensure a more sustainable and equitable future. Last year, we expanded our water business with the acquisition of the New England Service Company, and we continue to invest in renewable energy across our three-state service territory as we pursue a decarbonized grid.



Customers across Connecticut, Massachusetts, and New Hampshire

**3,262,000**..... electric
**887,000**..... gas
**226,000**..... water

**582** communities served

**4.4** million customers

**9,200** employees

## 2021 highlights:

invested
**$674 million**
in customer energy efficiency programs

owned and managed
**40,000 acres**
of natural habitat

**4,900** employees volunteered more than
**23,700 hours**
at company-sponsored events

small and diverse businesses collectively represented over
**$675 million**
of supplier spend

invested
**$3.5 billion**
in our energy and water delivery systems to make them more resilient and reliable

external hires
**57%** diverse

completed issuance of
**$300 million**
of green bonds

contributed
**$5.8 million**
to charitable organizations

# Our Commitment to Sustainability

We strive to treat our customers like family — because in many cases they are. Sustainability is embedded in the way we conduct our business every day and touches all facets of our company. Environmental, social and governance (ESG) priorities guide our efforts in conducting our business with the utmost care for the environment and our communities. Our industry-leading ESG practices are fully integrated into our governing policies and principles. We value the opportunity to secure a positive future for our stakeholders as we strive to be the #1 energy company in the nation, while continuing to earn the trust of our customers, attract talented new employees, and demonstrate our shared responsibility to protect our planet and its people.

## Environmental

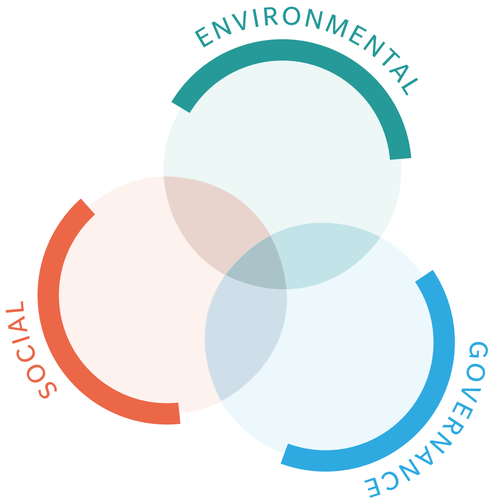
We are committed to environmental stewardship and minimizing our impact on the environment while addressing climate change.

## Social

We have a responsibility to conduct our business in ways that bring value to our communities and embrace our differences.

## Governance

We are dedicated to doing the right thing — acting with honesty and integrity and providing transparent information.



# Message from Our CEO

**"Our commitments to the environment, racial and social justice, community support, and customer service have not wavered."**

## LETTER FROM JOE NOLAN

I'm honored and privileged to lead our talented and diverse team of 9,200 employees. They delivered electricity, natural gas and water safely and reliably to our 4.4 million customers while navigating challenges beyond our control that affected our company, our industry and our society—ranging from major storms and increasing energy costs to international political turbulence and the ongoing COVID-19 pandemic.

Through this period, Eversource's commitments to the environment, racial and social justice, ethical and responsible business practices, community support, and customer service have not wavered. In fact, we have worked to deepen and strengthen them. In the past year, we have:

- *Worked hard on our industry-leading goal to achieve carbon neutrality in our operations by 2030. We have reduced our greenhouse gas footprint to13% since 2018 and are on track to achieve our goal by focusing on key operational areas that offer the greatest opportunities for reduction.*
- *Strengthened our existing commitment to social and environmental justice and equity for communities. This included the creation of an internal pro-equity advisory team to guide our efforts to advance equity in our communities.*
- *Further evolved our commitment to diversity, equity and inclusion through continued learning, initiatives and events that focused on a strong leadership commitment to building a diverse, equitable and inclusive workplace.*
- *Refined hybrid work policies that provided employees and the public with greater safety and flexibility during COVID-19 without compromising customer service. We continue to work with regulators to offer flexible bill payment options, recognizing the ongoing economic impact of the pandemic, and collaborate with community agencies to ease the impact.*
- *Advanced clean energy technologies with the strong potential to help our states meet their emissions reduction goals. These technologies include offshore wind, solar, energy storage, electric vehicle charging stations and geothermal.*
- *Offered our view on how to decarbonize the natural gas network in Massachusetts' Future of Gas regulatory proceeding.*
- *Continued our focus on environmental, social and governance (ESG) issues at the highest levels of management through our Board of Trustees' Governance, Environmental and Social Responsibility Committee.*
- *Maintained our generous charitable giving and volunteer programs to help underserved and vulnerable communities in our service areas, including our successful signature events and United Way campaign, which had strong participation from employees and retirees.*
- *Met our publicly stated financial goals and delivered solid results and dividend growth for our shareholders.*
- *Expanded our water delivery business, Aquarion, through strategic acquisitions, including the New England Service Company.*

This report summarizes our achievements in these and other areas. I hope you find it useful and informative. In a separate Diversity, Equity and Inclusion Report, we have also enhanced disclosures on our workforce demographics based on the racial, ethnic and gender identifications of employees from EEO-1 reports.

My friends and colleagues at Eversource are already hard at work advancing and surpassing our 2021 achievements. I look forward to continuing our momentum and sharing our accomplishments a year from now.

Joe Nolan

Joe Nolan

# Innovating for the Future

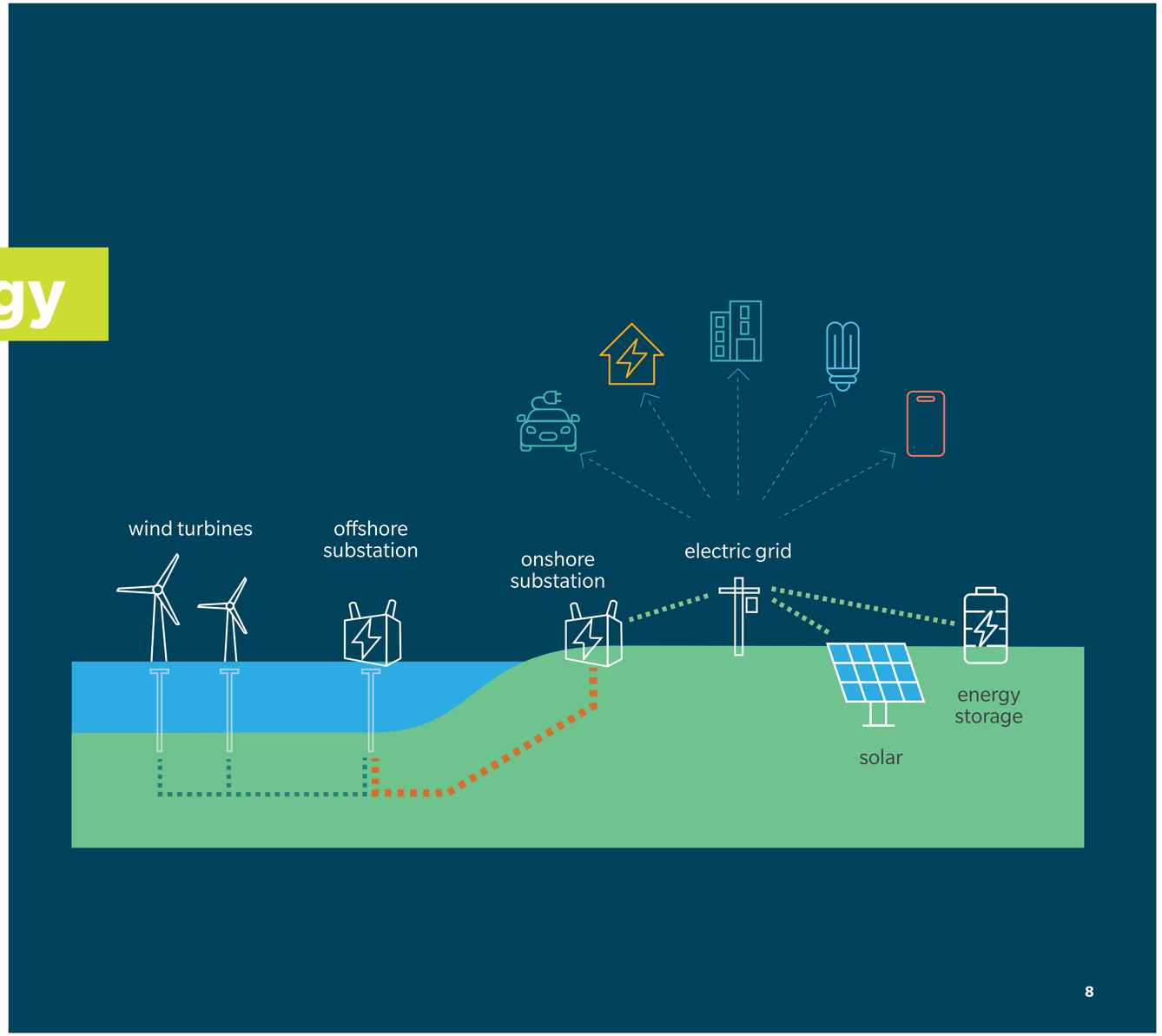
# Integrating Clean Energy

We are delivering innovative solutions to lower emissions, improve reliability and integrate clean energy resources into our system. We bring this commitment to our work every day, challenging ourselves to continuously improve.

## DELIVERING A CLEAN ENERGY FUTURE

We want to do our part in combating climate change. We are supporting the three states we serve in their aggressive GHG emission reduction goals as we invest in projects that will enable a cleaner grid. We are supporting the development of offshore wind, solar and energy storage — as well as innovative solutions like networked geothermal — as a potential alternative to fossil fuel heating and cooling.

The planning and permitting process for infrastructure is complex. Our goal is to ensure all neighbors in the communities impacted by our projects have an opportunity to engage in the decision-making process. We are committed to proactively connecting with our customers and communities in a variety of ways to provide transparent, engaging communications. We continue to modernize the grid and find ways to make the transition to clean energy work for everyone. We are providing more opportunities for our customers to participate in the clean energy transition by offering them opportunities to adopt new technologies, such as electric vehicles, and helping them lower their energy use.



## Offshore Wind

In partnership with Ørsted, the world's leading developer of offshore wind, we have secured at least 4,000 megawatts (MW) of offshore wind development opportunity in the Northeast. As a culmination of a multi-year effort, in January 2022, South Fork Wind received final approval to begin construction of New York's first offshore wind farm, which is expected to be complete in late 2023. This was only the second utility-scale federal approval in the country. We are currently leading onshore construction of this 130 MW offshore wind project, which will power approximately 70,000 homes once completed.

Additional projects in the permitting stage of development include Sunrise Wind and Revolution Wind, both of which will be built off the coasts of Massachusetts and Rhode Island. Together, these projects will provide approximately 1,760 MW of clean, renewable energy — enough to power more than 1 million homes across the region.

We continue to evaluate opportunities to maximize the value of our wind investments in partnership with states throughout the Northeast, and currently have the ability to more than double our commitment to offshore wind capacity within our existing lease areas — providing enough clean, renewable energy to power up to 2 million homes. Our leases offer significant competitive advantages, which include close proximity to the shore with shallow water and interconnection points in New England and New York. In addition to these projects, many additional offshore wind projects in New England are planning to interconnect to our transmission system, allowing us to provide customers with even more clean, renewable energy while decarbonizing the electricity sector to meet state climate goals.

### Our projects are supporting economic development, leading the way to revolutionize clean energy in New England:

Our offshore wind projects offer many benefits that go beyond the delivery of clean energy to the grid. They also generate valuable economic impacts, such as the development of innovative technology, new manufacturing and job creation that includes local, union labor.

**South Fork** will use the first American-made, utility-scale offshore wind substation, and will create 350 jobs across three states to support its fabrication.

We are building a **new facility** at the Port of Providence in Rhode Island, which will soon be used to support the fabrication of advanced foundation components integral for our portfolio of offshore wind farms.

**Sunrise Wind** will be the first to use high-voltage direct current technology, which is more efficient over long distances than alternating current.

We have partnered with **Sea Services North America**, a fishing consortium, to support safe navigation in and around our offshore wind farms.

We have signed an $86 million supply chain contract with **Riggs Distler & Company, Inc.,** to construct advanced foundation components for Sunrise Wind's wind turbines at New York's Port of Coeymans.

Eversource and Ørsted announced an agreement to charter Dominion Energy's **Charybdis**, the first Jones Act-qualified offshore wind turbine installation vessel built in the U.S. Charybdis is expected to be sea-ready by late 2023 and will first be deployed out of New London harbor in Connecticut to support the construction of Revolution Wind and Sunrise Wind.


## Solar

Our first projects to harness the power of the sun were installed more than 10 years ago, and today our 70 MW solar portfolio generates enough electricity to power more than 11,000 homes. Recent legislation in Massachusetts has expanded utility solar ownership opportunities and we are assertively pursuing them. We are committed to educating our communities on solar power generation and helping our customers understand the potential that solar generation represents for infusing the grid with renewable energy. We are optimistic in forging partnerships with the communities we serve to develop, own and operate solar projects paired with energy storage — a dynamic solution for supporting community climate resilience and reducing peak demand.

We also manage solar incentive programs for developing photovoltaic systems, which can lower energy costs for participating customers and support the region's climate goals. To date, Eversource customers have installed panels generating 1.9 gigawatts of solar energy. We work proactively to support policies in our states to sustain the growth of the solar market through long-term system planning and cost-effective investments. To this end, we are launching a community solar program in Connecticut and have proposed a new community solar initiative in Massachusetts to help lower barriers to solar access for low-income customers.

**Today, our 70 MW solar portfolio generates enough electricity to power more than 11,000 homes**

# We believe a portfolio of solutions will be impactful for efficiently decarbonizing the heating sector

## Decarbonizing the Heating Sector

Decarbonization of the heating sector is necessary if we are to achieve economy-wide emission reduction targets. We are supporting this transition by maintaining a safe and reliable natural gas system as we explore technologies, such as networked geothermal, while waiting for large-scale wind and solar projects to come online. We are collaborating with a diverse group of stakeholders to evaluate all pathways to cleaner fuel sources, considering important factors like environmental benefits, reliability, costs to customers, social and environmental justice, and the need to train our workforce to support these new resources. In addition to electric heat pumps, we believe, renewable natural gas and other biogas options may have an important role to play in decarbonizing the heating sector, especially for those commercial and industrial customers that may be difficult to electrify.

We are working with the states we serve as they evaluate electrification strategies targeted at the heating sector and we are piloting a networked geothermal project in Massachusetts to provide heating and cooling to customers from an interconnected system.

We are also assisting customers who use oil or propane as their primary heating fuel in the transition to lower-emitting options, such as high-efficiency electric heat or natural gas. In 2021, by providing cleaner-burning natural gas as their primary fuel source, we enabled nearly 10,000 residential customers to reduce their GHG emissions. Customers continue to request natural gas due to its reliability, convenience and environmental benefit compared to other heating options.

Research and development for emerging cleaner fuels, such as hydrogen, continues to advance. As we work to transition to a cleaner energy future with the integration of increased large-scale renewable energy resources, natural gas will continue to provide a safe and reliable heating option for customers.

### Working With the States We Serve

We are deeply committed to supporting the region's decarbonization efforts and recognize the importance of meeting the challenges presented by climate change. We support the three states we serve in examining the options to decarbonize the natural gas system to achieve our shared commitment to reduce GHG emissions. As an example, we are participating in the Massachusetts' Department of Public Utilities Docket #20-80 "Future of Gas" proceeding to decarbonize our operations and help achieve the Commonwealth's 2050 net zero emissions goal.

As part of this proceeding, Eversource, other Massachusetts gas utilities and interested environmental, business, labor and consumer advocacy groups participated in a robust stakeholder engagement process that included meetings, one-on-one sessions and a website to share information and feedback to help inform the utilities' decarbonization plans. In March 2022, we submitted our individual long-term decarbonization plan and expect Department approval by the end of the year.

In Connecticut, we are actively participating in the development of the state's new 2022 Competitive Energy Strategy, which will examine the future energy needs of Connecticut while identifying strategies to reduce costs, ensure reliability, affordability and equity, and reduce environmental impacts.

# We're making geothermal work on a whole new level


## Geothermal

Geothermal technology uses the stable temperature of the Earth to efficiently warm buildings in the winter and cool them in the summer through a series of shared piping, wells and heat pumps. While geothermal heating and cooling is not a new technology, this networked approach will be the first for a U.S. utility to undertake.

Working with our neighbors in Framingham, Massachusetts, we're rethinking how the Northeast can keep warm in the winter and cool in the summer. Once we received regulatory approval in 2020 to begin a pilot program and select a neighborhood to start this project, we received approval for Framingham — an environmental justice community — and the ability to begin construction in 2022. Service will be provided to a wide, cross-section of approximately 100 residential, apartment and commercial properties. A mix of current fuel sources will be included to help understand the emissions reductions and other benefits to customers who currently receive delivered fuels (oil or propane) or who use electric resistance and gas heating.

The pilot will be in operation for two heating and cooling seasons to gather sufficient data on the operational feasibility and customer response to this innovative project. The pilot will also help inform the possibility of rolling out a larger geothermal program as an alternative energy source to other areas in our three-state service territory.

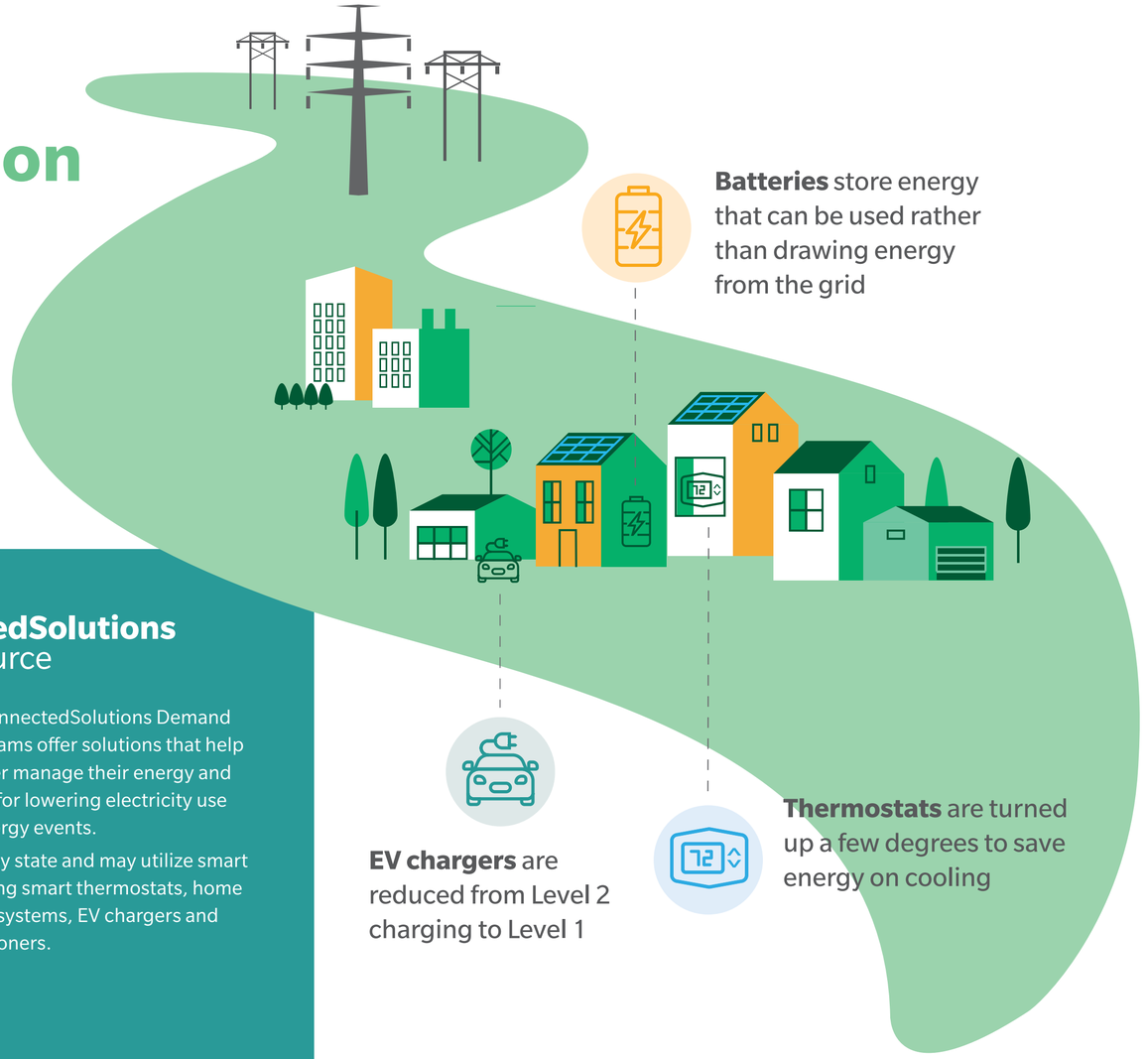
# The clean energy transformation requires energy storage

## Energy Storage

Energy storage can be used in a stand-alone configuration or in combination with other energy sources, such as renewable generation. This technology provides opportunities for increased adoption of clean energy and improved reliability and resiliency. It can also serve as an alternative to traditional distribution solutions when feasible.

In 2021, we introduced Energy Storage Solutions, a battery storage program for residential, commercial and municipal customers in Connecticut. Like our ConnectedSolutions program, it offers access to affordable backup energy storage to help customers be more prepared during storms. Participation in our battery demand response program rewards customers for drawing power from their battery system during times of high demand, lessening the strain on the electric grid. In many cases, this energy is drawn from batteries storing energy produced by our customers' solar panels.

We are also piloting an industry-leading, first-of-its-kind Battery Energy Storage System (BESS) in Provincetown, Massachusetts. The BESS is designed to improve system reliability and provide clean backup power during outages on the single distribution line that serves more than 10,000 customers in Provincetown, Truro and Wellfleet. We are constructing a 24.9 MW state-of-the-art lithium-ion battery system that will be capable of providing 1.5 to 3 hours of backup power in summer "peak" conditions and up to 10 hours at other times of the year when most major outages have historically occurred. This project will also strengthen reliability in the area by adding upgraded equipment that will create a "smart grid" to supply power to the Outer Cape towns on a continuous basis, not just when the storage system is called upon to operate.




### ConnectedSolutions at Eversource

Eversource's ConnectedSolutions Demand Response programs offer solutions that help customers better manage their energy and earn incentives for lowering electricity use during peak energy events.

Programs vary by state and may utilize smart devices, including smart thermostats, home battery storage systems, EV chargers and Wi-Fi air conditioners.

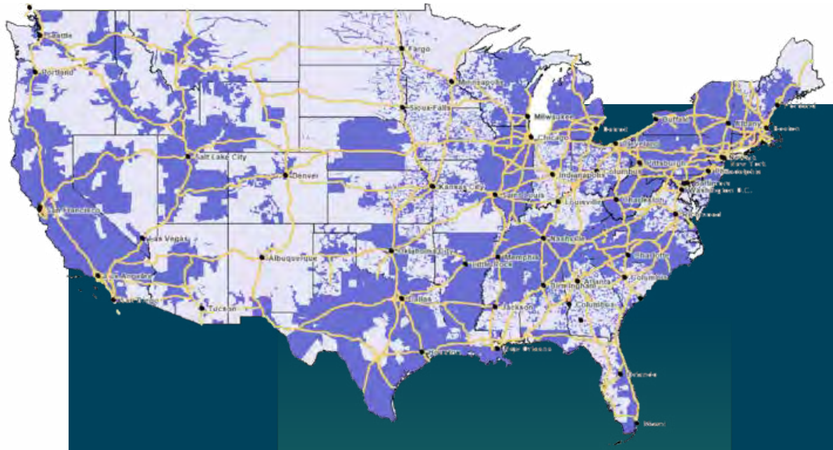
# Leading the charge in electric vehicle infrastructure

## Electric Vehicle Infrastructure

Transportation represents the largest contribution to the region's GHG footprint, and we are helping to combat this source of emissions by working closely with the three states we serve and other utilities. Our investment in local grid upgrades to support additional electric vehicle (EV) charging stations and the related educational resources we provide to our customers play a significant role in promoting the adoption of EVs.

In Massachusetts, we installed charging stations at more than 400 customer sites through the end of 2021 and built out a $55 million allocation with 3,500 public EV charging ports. Through this work, we maintained a strong focus on equity, with 19% of EV charging sites installed in environmental justice communities, exceeding our goal of 10%. We partnered with the City of Boston, E4TheFuture and Nuestra Comunidad to bring charging stations and the Good2Go car sharing program to Bartlett Station in Roxbury, Massachusetts, offering equitable clean transportation options to this neighborhood. We also worked with our regulators in 2021 to seek approval for expanding this program.

In 2021, Connecticut regulators approved an expansive nine-year EV program that we are managing, offering rebates for eligible charging stations and the associated installation at homes, businesses and public spaces. We will also be managing a program to address peak demands of at-home EV chargers. The program supports the state's transportation electrification goals and provides incentives for EV charging in a range of residential, commercial and publicly accessible locations, including underserved communities.




## National Electric Highway Coalition

We are proud to partner with more than 50 of the nation's leading utility companies in the National Electric Highway Coalition (NEHC), which will enable EV drivers access to uninterrupted travel across much of the country. Each utility will provide EV charging solutions within its service territory, connecting major highway systems across the country. Charging stations will provide universal DC fast chargers capable of getting drivers back on the road in approximately 20-30 minutes, and NEHC has committed to implementing the chargers by the end of 2023.


## AstraZeneca EV Charging Upgrade

As part of an ambitious goal to eliminate GHG emissions from its sites and fleets by 2025, AstraZeneca partnered with Eversource and the state of Massachusetts to upgrade its facilities in the Boston area to expand employee access to EV charging stations. The global biopharmaceutical company's massive 250-port EV charging hub, located in Waltham, Massachusetts, is the largest of its kind on the East Coast.

## Energy Efficiency

We are proud to be consistently recognized as a leader in energy efficiency by national industry organizations, including the American Council for an Energy-Efficient Economy. In 2021, we invested approximately $674 million in customer energy efficiency programs, leading to lifetime reductions in electricity consumed by 8,776 gigawatt hours (GWh) and natural gas consumption by 220 million therms.

Our energy efficiency programs help our electric and gas customers use less energy and save money. These programs include discounts, rebates and incentives for energy-saving products and services, professional energy assessments, tools to help customers better understand their energy use, and easy energy-saving tips.

As we implement energy efficiency solutions across our region, we are increasing engagement and providing additional support to customer groups that historically have had low participation. Economically stressed families and businesses that participate in our income-eligible programs are now benefiting from the long-term savings that follow these improvements.

We are leading the nation with our carbon-focused plans, representing a transformation of energy efficiency programs that aligns with our three-state service territory's aggressive GHG reduction and environmental justice goals. Our 2022-2024 plan in Massachusetts includes an intensive focus on electrification and replaces customers' fossil fuel heating equipment with high-efficiency electric equipment. Rebates provided through the Mass Save® programs for electrification are some of the highest in the country.

In 2021, as a sponsor of the energy saving collaborative Mass Save, we launched the Clean Energy Pathways program. This workforce development initiative seeks to boost the energy efficiency workforce and increase access to opportunities for individuals historically underrepresented in the industry, including women, people of color, LGBTQI+ people and first generation and/or multilingual individuals residing in environmental justice communities. This three-month internship program has the goal of placing 120 diverse recruits into the energy efficiency workforce while providing an hourly wage, professional development training, and other services and resources to support new recruits.


Our **Main Streets** energy efficiency program helps small businesses reduce their energy costs and environmental impact. Authorized contractors schedule no-cost energy assessments, answer questions about energy efficient equipment upgrades, and can provide some improvements on the spot. Larger projects, such as new HVAC equipment or energy efficient motor controls, are scheduled for future installation and may qualify for incentives and interest-free financing to offset the cost of upgrades. In Massachusetts, 2021 proved to be a very successful year, with nearly 54,000 small and micro businesses contacted across 37 communities and more than 1,200 energy assessments completed, leading to more than 16 GWh saved.

# More than 113,000 Eversource customers installed distributed generation facilities

## Distributed Generation

An increasing number of customers are exploring distributed energy resources (DERs), which refers to the production of electricity from small-scale energy sources, including solar, wind, fuel cells and micro turbines. We are enabling the safe interconnection of these assets to our electric distribution system, supporting our common vision for a safe, reliable and cleaner power grid. By the end of 2021, more than 113,000 Eversource customers installed distributed generation facilities totaling more than 2,959 MW of customer-owned energy resources now connected to our electric distribution system.

# Reliability and Resiliency

# Stronger and Smarter Enhancements

We continue to invest in system enhancements to deliver reliable energy and water to our customers with safe and resilient infrastructure. Proactive planning allows us to make cost-effective upgrades now to strengthen our systems so they will better withstand the increasingly extreme weather events and other issues associated with climate change.

## Transmission Planning

A strong, well-connected transmission network delivers power from the point of generation to where it's most needed and can allow for an optimized mix of energy sources. While this power has traditionally flowed in one direction from power plants to homes and businesses, in the modern electric grid, power flows in multiple directions — from clean energy resources both large (solar and wind farms) and small (rooftop solar panels and home batteries). These resources will grow dramatically over the next several decades in conjunction with the electrification of the heating and transportation sectors.

To seamlessly connect clean energy resources to the grid, we are focused on maintaining a robust transmission system that is affordable, reliable, efficient, flexible and increasingly automated, while also being resilient to damage from extreme weather. In 2021, we invested approximately $1 billion in the electric transmission system.

These investments have resulted in strong reliability and safety performance, improved resiliency, economic growth and the integration of more renewable energy in the region. As an example, we completed our portion of the Ready Path Solution, a joint project with National Grid in the Greater Boston area, ahead of schedule and on budget. This project was selected in ISO New England's first-ever competitive transmission solicitation and will help to retire 2,000 MW of regional fossil fuel generation by 2024.

In addition to investments for reliability and resilience, we continue to invest in transmission to enable integration of clean energy generation, such as solar and wind. By putting a new switching station into service in December 2021, we connected the Quinebaug Solar Project in Canterbury — the largest commercial solar project in Connecticut (50 MW) — to the grid. We are also working with several other developers on transmission interconnection projects that will provide approximately 400 MW of large-scale solar power to Connecticut. For offshore wind, we are constructing transmission to enable interconnection of Vineyard Wind's first 800 MW offshore wind project onto the Barnstable, Massachusetts, substation on Cape Cod. We are also working with Park City Wind to build the transmission necessary to interconnect an additional 800 MW of offshore wind on the Cape.

## Distribution System Enhancements

A strong distribution system is key to delivering energy reliably to our customers' homes and businesses. Present day distribution systems also serve as conduits to supply distributed generation back to the transmission system in areas with high concentration of DER. We are constantly improving our analytics, automation practices, technology and vegetation management on our distribution systems to enhance resiliency, maintain reliability and restore service as quickly as possible during outages while also enabling significant interconnection of distributed generation. Distribution automation enhancements are reducing the impact on our customers affected by any single outage event by more than 30% on average.

## Grid Modernization

We continue to implement innovative technologies to modernize our distribution grid with upgrades that improve service to customers, lessen the impact of outages, and increase the capacity of our system to incorporate clean, distributed energy resources.

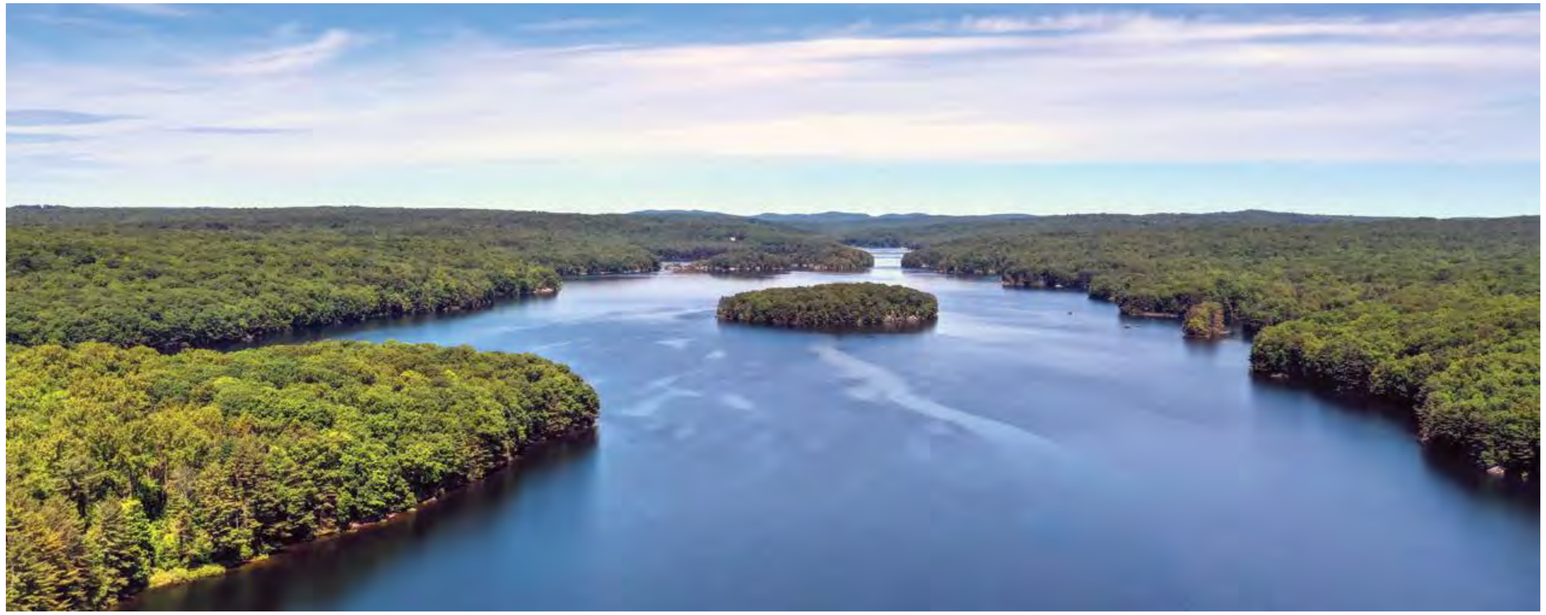
Advanced technology also allows for improved monitoring and control to optimize system operations in real time across varying system conditions. One such technology is Volt-Var Optimization, which actively manages voltage and reactive power flow, delivering the following benefits:

- *Ensuring that distribution voltages remain within prescribed ranges and are not fluctuating rapidly as additional renewable energy is added to the system.*
- *Identifying opportunities for conservation voltage reduction to reduce peak demand and energy consumption.*
- *Improving system efficiency and reducing line losses through optimized reactive power dispatch to reduce GHG emissions.*
- *Alleviating the voltage and power quality concerns that may otherwise limit the interconnection of new, renewable energy resources through active voltage management and mitigation.*

## Demand Management

Demand management is a valuable tool to curb emissions from energy consumption while helping to maintain the reliability of the electric grid. We have engaged more than 600 business and 33,000 residential customers using a range of demand reduction strategies and technologies that result in cost savings, reduced strain on the electric grid, and lowered GHG emissions by avoiding reliance on fossil fuel generation when demand is high.

# We are reinforcing essential facilities and future substations in coastal areas to better protect against storm surges



## System Hardening

We are reinforcing essential facilities and future substations so that they are "flood-hardened" to better protect against storm surges in coastal areas subject to severe weather. Our long-term substation flood mitigation strategy uses predictive modeling methods to better assess flooding risk to substation infrastructure. This datum aids real-time operational decisions before a storm hits and is a reference for future electrical system planning and substation asset strategy and design.

Our resiliency plan includes upgraded construction standards for poles, wires and other related system equipment; reconfigurable system designs; and enhanced year-round tree trimming and tree removal — all of which will improve the ability of our electric system to withstand severe weather patterns.

Additional solutions we are using to harden infrastructure include the use of tree wire and spacer cable in areas with dense tree cover, state-of-the-art aerial cables that strengthen the system in areas prone to storm damage and that help to minimize outages during storms, steel poles in critical rights-of-way (ROW), and updates so underground backbone cabling and electric service laterals.

## Water Infrastructure

In 2021, our Aquarion water supply business invested more than $144 million in projects to improve the capacity, reliability and resilience of its treatment and distribution water works. Projects were completed to remove contaminants, such as per- and poly-fluoroalkyl substances (PFAS), improve disinfection to reduce the risk of outages associated with bacteriological contaminants, and add storage capacity for everyday use as well as emergency uses for fire responses. Additionally, automation capabilities were expanded along with network security to address the ever-increasing threat of cyberattacks.

In October 2021, in recognition of our commitment to environmental responsibility while providing safe, reliable service to customers, Eversource received the Harry J. Banker Gold Leaf Award for our educational partnerships with arborists, municipalities, students and the public about planting the right tree in the right place.

## Vegetation Management

During storms, 90% of outages result from falling tree limbs. Effective vegetation management is vital to protect our electric infrastructure from severe weather impacts. In addition to increasing the frequency and severity of storms, climate change has also led to irregular periods of drought that weaken trees and compound the risks they pose to our electric infrastructure.

We have a comprehensive vegetation management program, which is crucial for meeting the need for safe, reliable electric service for our customers while monitoring the growth of forested areas and trees near power lines. Annual maintenance programs mitigate outages by reducing encroaching vegetation throughout our service territory. Our maintenance cycle is completed every four to five years and incorporates the removal of hazardous trees that threaten the system.

Research conducted by energy analysts at the University of Connecticut has determined that our year-round tree trimming and hazard tree removal program in Connecticut led to 900 fewer tree-caused power outage events per year based on outage events from 2009 to 2015. This comprehensive study illustrates how effective tree trimming is in reducing the number of tree-caused power outages throughout our three-state service territory.

Utility arboretums in all three states serve as a living resource to engage and educate tree wardens, municipal leaders, landscape architects and the public on the wide variety of trees and shrubs that can be safely planted near and under utility equipment. In 2021, we enhanced our award-winning utility arboretum in Hooksett, New Hampshire, to include a pollinator garden, a native shrub garden and improved walking paths.

Working with environmental organizations and land trusts, we are installing pollinator plantings to create and maintain critical pollinator habitats. And as part of our commitment to environmental stewardship, we plant thousands of trees and plants across our service territory each year and donate thousands of saplings to be planted in neighborhoods and public spaces.

# READY

## Emergency Preparedness

Climate change is already impacting New England with more frequent and intense storms, storm surges along coastal areas, urban flooding, and extreme winter and summer temperatures. In addition to strengthening our systems and infrastructure, we are also focused on remaining prepared to respond when service interruptions occur.

Our Emergency Response Plans (ERPs) are based on the implementation activities of the National Incident Management System (NIMS) and follow the Incident Command System, a standardized approach to managing emergency incidents. Comprehensive ERPs guide our response actions and keep our crews, staff and communities safe during extreme weather events. Our employees are trained and prepared to swiftly respond to any state or federal emergency and to work with local community first responders to ensure a coordinated response.

We use high-resolution weather and three-dimensional aerial and ground imagery to predict storm impacts. In partnership with the University of Connecticut, we've developed industry-leading outage prediction models that guide our preparation for impending storms up to three days in advance of impact. Employees conduct table-top and live training exercises using our emergency response procedures for electric, natural gas and water service disruptions. We also have contracts with hundreds of external utility contractors so we can prepare in advance for a safe and effective power restoration when a potentially significant electric outage event may occur.

Dams serve as a vital asset to the water business, and we meet or exceed state requirements for dam inspections and the provision of Emergency Action Plans. We perform emergency response exercises with communities downstream of our dams and have an active program for both routine maintenance and the significant capital investment needed to keep these vital assets safely in service.

Our gas business has a robust, long-term resiliency improvement program to mitigate the risk of future events and is a signatory to the American Gas Association's nationwide Mutual Aid Agreement. When activated, the agreement facilitates the use of qualified gas employees from across the country to augment our internal resources during a significant natural gas event.

# Environment

# Protecting and Preserving

## OUR RESPONSE TO CLIMATE CHANGE

Climate change is one of the greatest challenges facing the globe, and we know that timely action is needed to protect the future of our planet, communities and business. We are already seeing these impacts and have taken action to strengthen our infrastructure and work with our communities and other stakeholders to ensure we are collectively prepared to respond to more frequent and severe weather events. While our priority continues to be the safe delivery of essential services our customers depend upon, we are also in a unique position to help mitigate climate change through aggressive emission reduction measures from our own operations and beyond.

In support of our region's goals to realize a low-carbon future, we are proud to serve as a catalyst for clean energy to lower regional emissions from the electric, heating and transportation sectors, and to serve a critical role in achieving aggressive state climate goals. Our system hardening and grid modernization programs will also mitigate the impact of severe weather events due to climate change. In addition, we continue to bolster the reliability of the regional electric system with strategic initiatives to make the grid more resilient to New England's increasingly unpredictable weather.

We are also working with customers to reduce their carbon footprint through solutions such as energy efficiency programs, enabling renewable energy interconnection, and advancing EV infrastructure and energy storage capabilities. We will continue to build on these achievements as we identify additional opportunities to mitigate and adapt to climate change impacts.

## Eversource and the **University of Connecticut**

In 2021, we extended our joint commitment with the University of Connecticut (UConn) by investing an additional $14 million to maintain the Eversource Energy Center through 2028. The Eversource Energy Center got its start in 2015 and has been a dynamic partnership between UConn faculty, students and Eversource in which state-of-the-art research, technology and software aim to solve real-world challenges for electric customers where weather, climate and energy intersect. Current research areas include projects on storm outage forecasting, tree and forest management, electric grid reinforcement, resiliency, climate change and flooding, geomagnetic disturbances, integration of renewable generation, and cybersecurity. The extended partnership includes a commitment to engage underrepresented and diverse undergraduate students in all areas of sustainable research, aligning with our increased focus on racial and social justice.

## CARBON NEUTRALITY GOAL

One of Eversource's most important initiatives is to achieve carbon neutrality in our operations by 2030. This is an aggressive goal requiring support from all areas of the company to reduce our GHG emissions to as close to zero as possible. For emissions that cannot be avoided, we are preparing to invest in credible offsets.

Since our base year of 2018, our GHG footprint has declined by 13%. Much of this success is due to the dedicated projects associated with our carbon neutrality goal, which are driving reductions in our operational emissions. However, the extent to which we can directly influence these emissions varies. One key example of this is the scope 2 emissions associated with line loss, or the energy lost through the transmission and distribution of electricity delivered to our customers. Due to the regulatory environments under which we operate, state law precludes us from owning generation other than specific exceptions, such as a limited amount of solar in Massachusetts. Therefore, the emissions associated with energy generation and subsequent line loss are largely outside our control. The more that fossil fuels are used to generate energy over cleaner sources like renewable energy, the higher the emission intensity becomes for electricity and line loss.

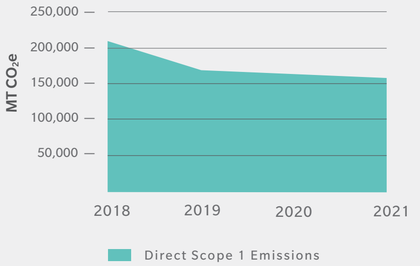
This is precisely what has happened in New England as increased use of fossil fuels has been required to meet growing demands for energy until large-scale renewable energy projects in the region have a chance to catch up with this demand. As a result, the emission factors used to calculate our line loss have shown a significant increase, and since line loss accounts for the greatest portion of our overall emissions, we have seen a 5% increase in our GHG footprint from 2020 to 2021. This upward trend in emissions for line loss may continue in the near term. Our investments and programs to enable more solar and wind energy in our region will reduce the emission intensity of the grid and subsequently show a decline in emissions associated with our own energy use and line loss.

Importantly, we've been successful in decreasing all other sources of our scope 1 and 2 emissions in the past year, indicating that our dedication to driving emissions down where we have the greatest ability to do so is showing favorable results. We are improving the efficiency of our facilities, adopting more hybrid vehicles in our fleet, and implementing maintenance and system upgrade projects to cut fugitive emissions of methane from our natural gas pipes and services and sulfur hexafluoride ($SF_6$) leaks from our electrical insulating equipment. These and future emission reduction projects are all made possible due to strategic planning and implementation along with the full support of Eversource employees across the company.

As we look to 2030, we know there is still a lot of work to do, and we will continue to test innovative technologies and explore all options to cut emissions. A dedicated internal governance structure is in place to execute the initiatives needed to achieve this goal, and employees from across the company are deploying emission-reduction plans, engaging internal and external stakeholders, and preparing to offset emissions that cannot be avoided with credible investments. We are also looking to complete a comprehensive evaluation of indirect scope 3 emissions from our value chain, quantify these sources as best we can, and develop a strategy for how we can reduce these indirect emissions. These efforts underscore our commitment to join the states where we operate, our customers, our employees, our investors and others in combating climate change.

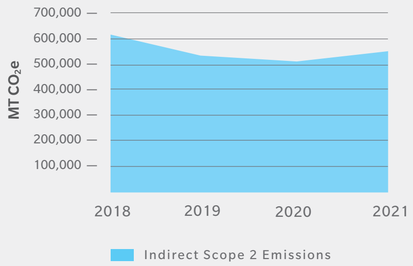
## 2021 Reductions in All Direct Emission Sources

**4% decrease from 2020 to 2021 driven by projects to cut fossil fuel use and fugitive emissions**



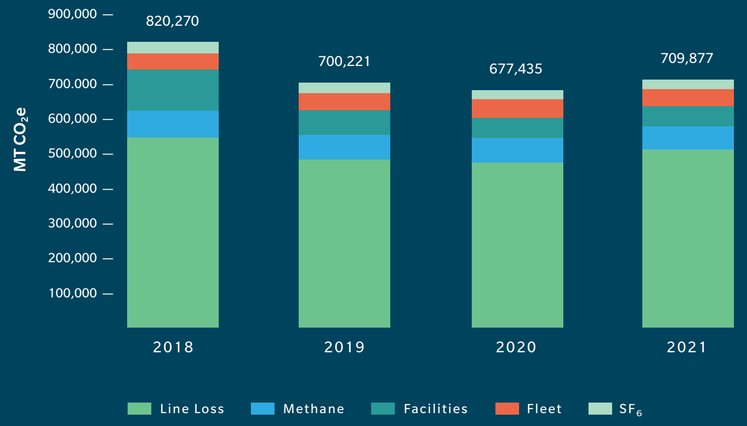

Scope 1 emissions reflect the CO2e of stationary and fleet combustion of fossil and biofuels as well as direct (fugitive) emissions of methane and $SF_6$.

**10% increase from 2020 to 2021 driven by more carbon intensive regional grid emissions**




Approximately 90% of the scope 2 emissions stems from line loss, with the remainder associated with the electricity used at Eversource facilities and a very small amount of district heating and cooling at a single facility.

## 13% Reduction in Total Emissions Since 2018



## We are focused on achieving our carbon neutral goal by reducing emissions in five key operational areas.

### Line Loss

The energy lost when power is transmitted and distributed across the grid, known as line loss, is one of the electric industry's biggest sources of indirect emissions. Collaborating with state and regional efforts to incorporate a cleaner mix of energy within the grid is the most effective way to minimize impacts associated with line loss. We are also implementing distribution infrastructure projects that will enhance system efficiency. These include projects to interconnect distributed energy resources and projects that replace inefficient distribution transformers.

8%↑

### Methane

By replacing aging, bare-steel and cast-iron natural gas pipelines, we are not only reducing methane emissions but also enhancing the safety of the network. Since 2018, we have replaced more than 447 miles of aged, leak-prone natural gas distribution infrastructure, including 125 miles in 2021 alone. Looking ahead, we plan to exceed historical upgrades with more than 140 miles of pipe replacements in 2022. We also remain focused on pursuing long-term solutions such as evaluating electrification options and decarbonizing natural gas for our customers by exploring low- or no- carbon gases that can be blended with natural gas or used as an eventual replacement. These alternatives include renewable natural gas, which is created from landfills, wastewater treatment facilities and farms, and possibly hydrogen, which can be produced from clean energy resources like offshore wind.

5%↓

### Facilities

We continue to pursue aggressive strategies aimed at reducing electricity and fuel use at our facilities. We are evaluating and upgrading HVAC equipment with more efficient models, including electric heat pumps. Our successful efforts to replace energy-intensive lighting with LEDs at the majority of our facilities have now been expanded to target converting all facilities by the end of 2022, including Eversource Gas of Massachusetts (EGMA) facilities (former Columbia Gas facilities), which we acquired in 2020. Similarly, we are implementing measures to lower our energy use with control system upgrades and space optimization, by improving building envelopes, and by integrating renewable energy when feasible. In 2021, we sourced over 52,000 MWh of renewable energy for our facilities and completed the installation of a rooftop solar system at our Aquarion customer service center in Monroe, Connecticut.

1%↓

### Fleet

A key focus for our fleet operation is to reduce emissions from fuel consumption. To this end, we continue to adopt hybrid vehicles and incorporate alternative fuel sources to diesel and gasoline, such as biodiesel. In 2021, we were able to replace more than 36% of our fleet diesel with a biofuel blend. We have also established partnerships with vendors that are developing innovative technologies, such as AltecJEMS® and XL Fleet, that specialize in emission-reducing tools and technology to help reduce idle time and improve fuel efficiency. Looking ahead, we aim to complete the procurement we began in 2021 to expand our fleet with hybrid vehicles, and we will continue to explore emerging fuel sources like renewable diesel and hydrogen as possible alternatives to fossil fuels. By 2030, our goal is to have 100% of our bucket trucks utilizing hybrid technology.

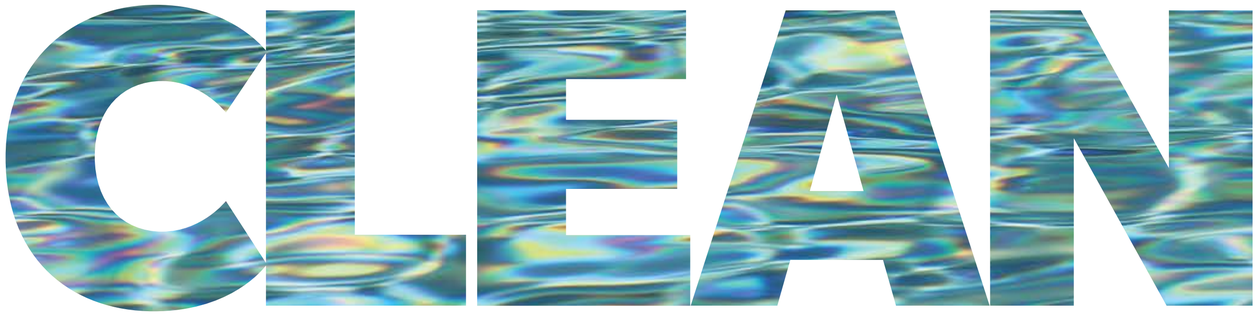
3%↓

### $SF_6$

We have made great progress in reducing sulfur hexafluoride ($SF_6$) gas emissions from our existing electric equipment through strong maintenance practices and the successful implementation of a detailed $SF_6$ gas tracking and inventory program. We are working with industry partners to research and test solutions to reduce the dependency on $SF_6$ gas in high-voltage electrical equipment, which includes piloting $SF_6$-free equipment. In 2020, we began planning our first pilot project utilizing $SF_6$ alternative technology at a substation in Preston, Connecticut, and we expect it to be in service by the end of 2022. In anticipation of non-$SF_6$ solutions coming to market, we have designed certain equipment, including a substation in Cambridge, Massachusetts, to be ready to accommodate these alternative gases.

1%↓

## Progress from 2020 to 2021




## PROTECTING WATER

### Water Management

We are committed to protecting and conserving water as a natural resource throughout our operations. The largest contribution to our water footprint is associated with our water utility, Aquarion Water.

We use high-tech and boots-on-the-ground methods to find leaks in our distribution system. In 2021, we replaced 22 miles of water main to reduce the likelihood of leaks and main breaks.

We encourage customers to join us in responsible water use. Despite a wet year in 2021, we expanded our water conservation programs to include proactive communication with high water users, and added additional towns to a twice-weekly irrigation schedule. Demand management is an important tool as we seek to climate-proof our water utility.

### Drinking Water Quality

As stewards of the environment, we promote sustainable practices and habitat management. This includes actively monitoring reservoir ecosystems throughout our Aquarion Water company. We have a long history of monitoring the quality of the water in our watershed and reservoirs to optimize treatment. In 2021, we completed a multi year effort to map the presence and density of invasive aquatic plants in all our Aquarion reservoirs. These plants crowd out native species, affecting light levels, the food chain and water quality, and contribute to increased organic loading in our treatment facilities. In addition to the mapping effort, we conducted an invasive species management pilot at Laurel Reservoir in Stamford, Connecticut, to remove hydrilla and Eurasian milfoil. The reservoir's biomass was mapped before and after removal efforts and will be assessed again in 2022 to measure the efficacy of the different removal methods. This pilot program will help us determine the most effective and economical method of invasive species removal.

**Safe, clean drinking water is our highest priority; to this end, we performed over 175,000 water quality tests in 2021**

# Aquarion's water barrel program helps customers conserve water and reduce their water bills

Safe, clean drinking water is our highest priority, and we performed over 175,000 water quality tests in 2021. Samples are collected from a variety of locations as we continually monitor water from our reservoirs, wells, treatment facilities and distribution systems for more than 100 compounds, including:

- *Microbial contaminants from septic systems, agriculture and livestock operations, and wildlife.*
- *Inorganic contaminants, such as salts and metals that can naturally occur or result from urban stormwater runoff, industrial or domestic wastewater discharges, or farming.*
- *Pesticides and herbicides from sources such as agriculture, urban stormwater runoff and residential uses.*
- *Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes.*
- *Naturally occurring radioactive contaminants*
- *Lead and other contaminants as required by the EPA.*

Throughout New England and across the nation, state and local officials, health departments, and water utilities have focused their attention on PFAS, a group of man-made chemicals that have been detected in drinking water. PFAS can enter drinking water through industrial and commercial releases to water or air, discharges from sewage treatment plants; leaching from septic systems and landfills; land application of wastewater treatment biosolids; and the use of fire-fighting foam. We are monitoring our water systems for PFAS and make our sampling results available on the Aquarion website, aquarionwater.com.

All water delivered to residents and businesses in Connecticut, Massachusetts and New Hampshire meets regulatory standards and guidelines. In some cases, we have discontinued the use of individual wells due to the presence of PFAS. In these instances, we are investing in treatment systems to ensure the resilience of our water supply and the safety of our drinking water.

## Aquarion's **Water Barrel Program**

Aquarion offers its customers rain barrels to help them conserve water by collecting and storing rainwater. The 60-gallon barrels are designed to fit under downspouts to catch rainwater runoff and are offered to customers at discounted prices. These upcycled barrels help direct water away from home foundations and include a kit to connect to drip irrigation, soaker and garden hoses.

# We own and maintain approximately 40,000 acres of land throughout our service territory

## ENVIRONMENTAL STEWARDSHIP

We are committed to environmental stewardship and take great care to preserve biodiversity, promote conservation and protect wildlife and natural and cultural resources. We are also committed to evaluating and reducing the potential impacts of our operations on the environment.

### Land Preservation

We foster the long-term vitality of the land we manage and we strive to promote diverse, native habitats. Our Eversource Land Trust consists of nearly 1,000 acres of permanently protected open space in Connecticut, much of which is open to the public for recreational use. We also own and maintain approximately 40,000 acres of land throughout our service territory, along with more than 15,000 acres of protected watershed land managed by a partnership with the Connecticut Department of Energy and Environmental Protection, The Nature Conservancy, and Aquarion. Through this partnership, we work to protect the many functions and resources of forested land. Our stewardship activities include helping our partners route and maintain recreational trails, preventing erosion and shielding critical habitat, enforcing usage regulations and state laws, and acting as a good neighbor to adjacent landowners.

### **Food Forest Initiative of Cape Cod** and Eversource

We are teaming up with the Food Forest Initiative of Cape Cod and the Harwich, Massachusetts, Water Department to plant edible and pollinator shrubs within a powerline easement. The collaboration will create a sustainable landscape comprised of various edible plant species, including raspberry, blueberry and hazelnut, accessible to the public and compatible with the existing distribution ROW.

## **Bobcat Study** on Eversource Land

Gillian is a bobcat living on Eversource-owned land in Connecticut. She is named after Gillian Carroll, Eversource's Land Management Administrator who is partnering with Connecticut's Department of Energy and Environmental Protection's (CT DEEP) Wildlife Division and UConn biologists to support bobcat studies within urban areas. These studies can tell scientists more about the bobcats' movements and resource needs and how they interact with the landscape. The collaboration with CT DEEP's Wildlife Division is a part of our environmental stewardship initiative to build upon existing relationships with regulators and environmental stakeholders, such as land trusts and nonprofits that promote species conservation.

## Wildlife and Habitat Protection

In partnership with our transmission, distribution and vegetation management divisions, we strive to minimize the impacts of our operations on habitat that sustains a variety of species within our ROW. Through management of our ROW for early successional habitat, we are able to provide a niche habitat, which is essential to the conservation of many protected species of insects, plants, birds, amphibians and reptiles.

We often work in partnership with state and federal environmental agencies and other external stakeholders on stewardship.

2021 initiatives included:

- *Installing a new pole and platform to welcome a pair of returning osprey to a new nesting location at a busy construction site in Branford, Connecticut. Osprey, which often mate for life, return to the same nest each year.*
- *Partnering with the CT DEEP Wildlife Division in Connecticut to study bobcat habitat use on eight Eversource-owned land parcels. The data collected on these properties, which represent only a portion of the total study area, will be used to determine the abundance and distribution of bobcats in the state.*

**We work in partnership with state and federal environmental agencies on stewardship initiatives**

## Osprey Management

Osprey are often attracted to utility structures as a place to perch and nest, which can be dangerous for the birds and cause service reliability issues for customers. To help manage this issue, we install deterrent devices to discourage osprey from building nests in locations that are likely to cause them harm, and we follow strict guidelines set by the United States Fish & Wildlife Service and Migratory Bird Treaty Act when maintaining our electric system around osprey nests that are already established. These rules include not disturbing active nests that contain an egg or a flightless chick, unless the life or viability of the egg or chick is threatened by the nest's continued presence on the utility structure. Should the nest need to be removed, we will relocate the nest or work with our wildlife rehabilitator partners to ensure birds are prepared for release back into the wild. We also encourage the public to report nest locations through an online form on the Eversource website.

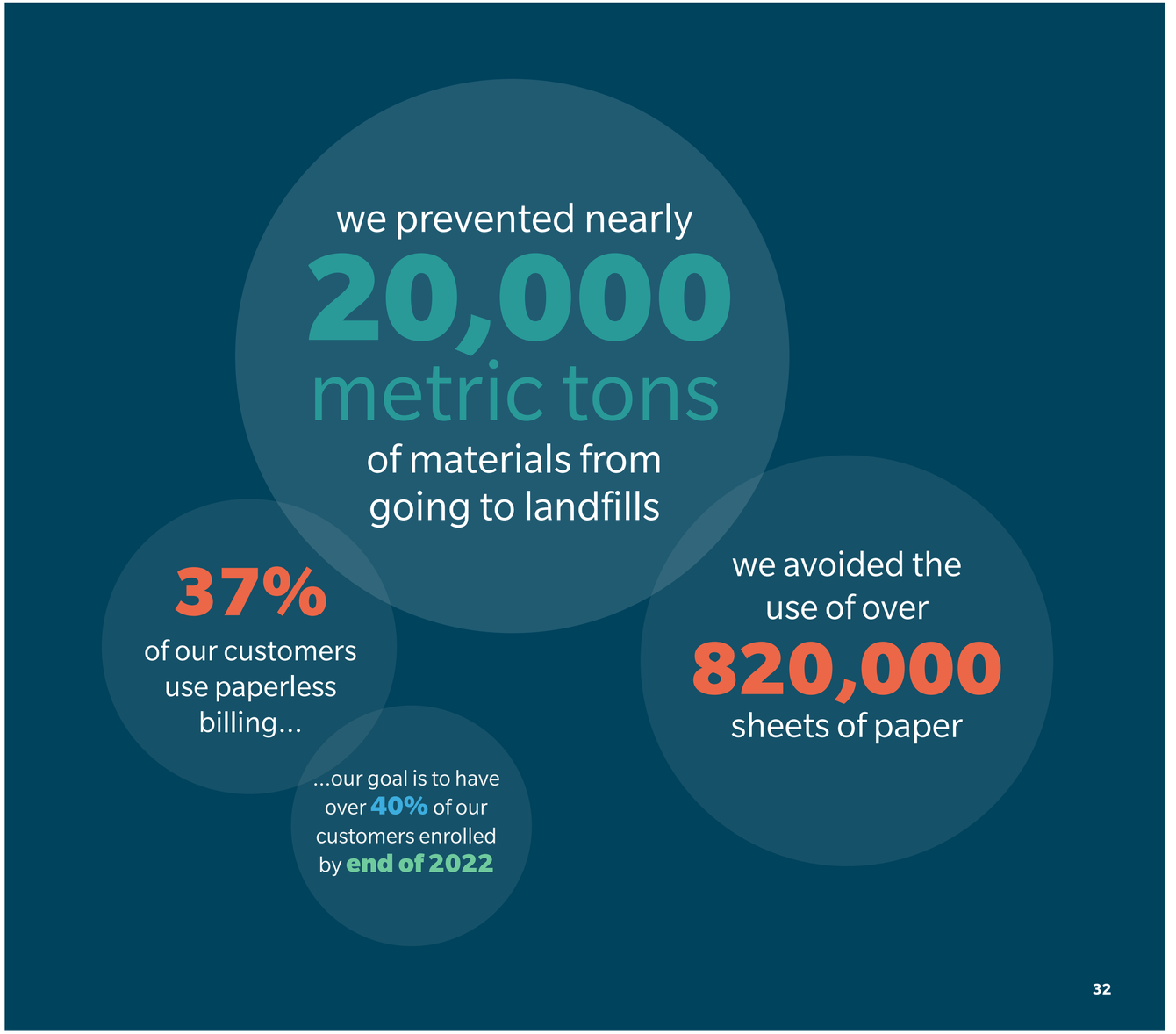
Given the abundance of osprey nesting on our utility poles on Cape Cod, we've developed the Cape Cod Osprey Management Plan (CCOMP) through close collaboration with environmental stakeholders including Mass Audubon, Wild Care, Inc., New England Wildlife Centers, the Towns of Barnstable and Falmouth, and the Commonwealth of Massachusetts Division of Fisheries and Wildlife. Guided by our Avian Protection Plan, the CCOMP was developed to protect osprey and reduce osprey-related power outages and service interruptions.

## WASTE MANAGEMENT

We are minimizing waste through reuse, recycling and investment recovery practices. In 2021, our programs prevented nearly 20,000 metric tons of material from going to landfills. A formal assessment of all waste streams is underway to identify opportunities to reduce volume and ensure waste is managed or recycled in the most environmentally appropriate manner.

We also look for opportunities to avoid creating waste. Our employees are encouraged to avoid printing documents whenever possible, and when necessary, to print double-sided. In 2021, we avoided the use of more than 820,000 sheets of paper by restricting certain printing. As of the end of 2021, more than 37% of our customers have chosen to participate in paperless billing. Our goal is to have over 40% of our customers enrolled by the end of 2022, reducing paper use and improving convenience.

Sustainability is a key focus of our robust investment recovery program, focused on recouping the value of assets and reducing waste by repurposing materials through sale, auction and donation. Materials we target for investment recovery include scrap metal, distribution and substation transformers, batteries, generators, inventory overstock, vehicles, office furniture, computers, and warehouse equipment. To limit their impact on natural resources, we are having some of our electric system transformers rebuilt to new standards.



# Social

> **We are rethinking the way we operate our business to focus on providing equitable experiences to all customers.**
>
> — Theresa Hopkins-Staten, Vice President, Corporate Citizenship and Equity

## PROMOTING EQUITY IN OUR COMMUNITIES

**How did equity start at Eversource?**

After the murder of George Floyd, a movement calling for accelerated social justice swept the nation. And Eversource is proud to be a part of this movement. Building on our strong values that focus on diversity, equity and inclusion in our workplace, we began taking proactive steps to effectively counter systemic bias and racism that impact customers in the communities we serve. I interviewed senior officers and used their responses to create our equity strategy and guiding principles. We then formed the Pro-Equity Advisory Team (PEAT) consisting of 15 multi-generational and diverse employees from across our organization. The PEAT has been instrumental in creating guidelines, tools and resources to help our leaders evaluate their work.

**Eversource seems ahead of the curve on incorporating equity into its business processes as it relates to impact on customers. Do you agree?**

Yes. While our peers and other Fortune 500 companies have tucked equity into their diversity and inclusion strategy or sustainability work, we've placed a full focus on equity as a business differentiator. As a regulated utility, we touch millions of customers and hundreds of communities throughout New England. With our strong commitment to diversity, equity and inclusion, we must continue to drive toward equitable outcomes for our customers and communities. We care about our customers — our employees are also customers who live in the neighborhoods we serve — and we are obligated to take a fresh look at how we are communicating and engaging with our neighbors. We know that "one size does not fit all" and that certain customer segments need additional attention to ensure we are reaching them in the languages they speak, at locations close to them and in ways they find most convenient.

**How can we further integrate equity into our work?**

Equity begins with a commitment and a willingness to do better. Equity work begins on the inside — by opening our hearts and our minds and remembering that we are all human beings living together in the same world. Ensuring equitable outcomes for our customers means challenging ourselves and each other to look inward at how we do things and identify and address unintended barriers that impact our customers. Equity is about doing a better job at living together. It's about collectively working toward what should be.

# Employees, Customers and Communities

**Equity means engaging all stakeholders, including our customers and communities, with integrity, respect and dignity while working toward fair and just outcomes, especially for those burdened with economic challenges, racial inequity, negative environmental impacts and justice disparities.**

We remain focused on the well-being and safety of our employees, customers and communities. Diversity, equity and inclusion (DE&I) are core values that drive the way we do business and strengthen our bonds within our workforce and the multicultural communities we serve.

## PROMOTING EQUITY AND JUSTICE EXTERNALLY

We are committed to recognizing and understanding historical and current issues of racial inequality and social injustice in our communities. We take to heart the importance of fair treatment and meaningful engagement of all people, regardless of race, color, national origin, English language proficiency or income — including individuals who may be marginalized in any way — with respect to our business and the communities we serve. We recognize that historical inequities and ongoing disparities, particularly for those communities that are predominantly Black, Indigenous and People of Color (BIPOC); environmentally burdened; and economically challenged, must be addressed.

To demonstrate our commitment and focus on equity and racial and social justice in our communities, we have a Vice President of Corporate Citizenship and Equity and we launched a 15-member internal cross-functional Pro-Equity Advisory Team in 2021. This group is tasked with developing strategy, guidelines, leadership toolkits, training materials and decision frameworks to ensure our business decisions related to the impact on our communities are anchored in equity. As we plan projects, programs and services for our customers, we are focused on ensuring fairness, meaningful communication, and increased outreach and engagement.

We understand that environmental justice considerations must be part of our everyday business operations, community support and project considerations as we modernize the energy sector, and we are committed to meeting them.

## Our Corporate Statement to Lead Equity in Our Communities

We are committed to:

**Recognizing and understanding historical inequities and ongoing disparities, particularly for those communities that are predominantly Black, Indigenous and People of Color (BIPOC), environmentally burdened and economically challenged.**

**Rectifying inequities to govern our work in and through the various ways we engage with our stakeholders.**

**Ensuring our stakeholders feel respected and that our work supports their dignity.**

**Improving our operational and corporate processes, systems and practices to better understand and serve the needs and unique circumstances of our employees, customers and communities.**

Together, we will work through systemic biases and challenges.

## Eversource Diversity, Equity and Inclusion Plan

We are focused on and working to accelerate progress on meaningful, positive change in our workplace and our communities.

Build a More **Diverse, Equitable** and **Inclusive** Workplace

Increase **Leadership** Commitment

Increase **Supplier Diversity**

Support our **Diverse** Communities

# We are committed to creating a workplace that values and welcomes all, embraces differences, and supports the diverse communities we serve

## OUR EMPLOYEES

### Diversity, Equity and Inclusion

DE&I is a core value and a key driver of building a diverse, empowered and engaged team that safely delivers great service to our customers. We are committed to creating a workplace that values and welcomes all, embraces differences, and supports the diverse communities we serve. We continue to work hard to forge progress in building a diverse, equitable and inclusive workplace; in becoming an employer of choice; and in being a JUST company recognized for our robust ESG practices. We know that an engaged and empowered workforce that reflects and advocates for the communities we serve is critical to our mission of delivering superior and equitable customer service to our 4.4 million customers.

Our DE&I Strategic Plan is focused on five key areas: leadership commitment, diverse workforce, inclusive workplace, diversity supply and community impact. This work is led by senior leadership in conjunction with our DE&I Council.

Our DE&I Council is a cross-functional team representing executive sponsors and Business Resource Group (BRG) leaders from across Connecticut, Massachusetts and New Hampshire. The Council helps set strategy and lead the implementation of initiatives supporting our DE&I strategic goals.

Executive leadership promotes and supports DE&I by building diverse, inclusive and engaged work teams and supports the work of our DE&I Council and our six employee BRGs. The Board receives regular updates and sets annual key performance DE&I metrics and goals.

We are a signatory to the CEO Action for Diversity & Inclusion pledge, demonstrating our ambition to advance diversity and inclusion in our workplace and to drive accountability for progress throughout our organization. We are a member of Paradigm for Parity, a coalition of business leaders dedicated to addressing the corporate leadership gender gap. We also continue to collaborate with the Edison Electric Institute (EEI), supporting the EEI DE&I Commitment with initiatives and metrics.

We are proud to continue receiving local and national awards recognizing us as an employer of choice, particularly for our work with veterans, women and employees with disabilities. We highly value and actively recruit military veterans, and have received numerous national honors and awards for our best-in-class programs and practices to hire, develop and support military veterans, reservists and their families.


Detailed information about our DE&I progress — including demographic and EEO-1 data metrics and our policies, practices, programs and journey — can be found online in our **2021 DE&I Report**.

For the third year in a row, we have been included in the Bloomberg Gender-Equality Index for our work in gender parity. We have also received recognition for our efforts to hire, support and enable employees with disabilities. Our initiatives meet and exceed legal compliance, encourage accommodation requests, and provide resources for people with physical and mental disabilities. We have also been long-term board members of Disability:IN Connecticut, a coalition of more than 250 business members whose mission is to improve recruitment and retention of qualified persons with disabilities.

## Promoting Racial Equity and Social Justice In Our Workplace

In 2020, in response to the death of George Floyd and the urgent calls for accelerated action and social justice, we increased our focus on driving more meaningful, positive change in our workplace and in our communities by addressing racial inequity and social justice. We updated our DE&I strategy to include a Racial Equity and Social Justice Plan, with three areas of focus: building a more inclusive workplace, increasing our leadership commitment, and further enhancing support for our diverse communities and diverse suppliers.

We launched a Racial Equity Task Force focused on talent management, inclusion and support of our under-served and environmental Justice communities. In 2021, we increased our focus on providing learning and engagement opportunities for our employees to deepen understanding of and commitment for taking action. We hosted a highly attended "Day of Understanding" virtual event focused on disrupting racism followed by allyship training and racial equity dialogues. We launched a DE&I Book Club and held signature learning events to celebrate Black History Month, Hispanic Heritage Month and Asian American and Pacific Islander Heritage Month — all of which focused on the history, contributions and current challenges of each group. We are encouraged by the level of employee engagement and look to continue these critical learning opportunities and dialogues that benefit our workplace, communities and beyond.

**57%**
**of our external hires were women and People of Color, exceeding our goal of 48%**


For the third year in a row, Eversource was included in the **Bloomberg Gender-Equality Index** (GEI), which recognizes companies around the globe committed to advancing women's equality in the workplace through policy development, representation and transparency. To be included in the index, publicly traded equities must meet a threshold on more than 70 gender-related data metrics. This continued recognition reflects our unyielding commitment to diversity and inclusion as one of the most important core values at Eversource.

# Our employees are our most valuable asset and key to our success

## Workforce Development

We are dedicated to supporting our employees and their career development by providing growth opportunities, tuition assistance and a variety of field and classroom training, which supports ongoing professional growth and drives the success of our business.

Employee development programs are aligned to strategic business plans to address immediate and long-range talent needs and promote succession within all levels of the organization. These programs include everything from pipeline development programs and technical skills and competencies for the evolving energy industry to leadership skills and behaviors necessary to effectively and ethically lead in the changing workforce.

One example is our Key Talent Development Program, which offers high-potential employees with diverse backgrounds unique opportunities to develop important skills for success, including thought-provoking stretch assignments, cross-functional engagement, executive visibility and diverse learning experiences. These experiences promote interdependent thinking and alternative perspectives while building teamwork and collaboration.

As we emerge from the pandemic and face many workers moving toward retirement, we are focused on ensuring our current and future workforces are equipped with the necessary skill sets to transition alongside our evolving business. We've developed proactive recruiting strategies to attract experienced workers in highly technical and emerging roles, such as cybersecurity, renewable energy and grid modernization.

We also have several established community college partnership programs in the three states we serve that feed our craft roles; multiple cohort and trainee programs in technical and other critical areas; and robust internship and apprentice programs. Staffing strategies for the next five years will expand on these programs and focus on increasing our pipelines for diverse talent, including women in science, technology, engineering and math (STEM).

## **Capital Community College** and Eversource

In June 2021, we celebrated the graduation of the inaugural class of our Electric Lineworker Certificate Program at Capital Community College in Hartford, Connecticut. Fifteen students from across Connecticut spent 11 weeks preparing to work in a variety of electrical fields. We also provided funding so that students who would not otherwise have been able to afford the training would have the opportunity to learn a valuable new skill. The program is designed to develop a new generation of diverse lineworkers in Connecticut, ensuring an ongoing supply of talent with the opportunity to work and thrive in this highly skilled role. We've developed several unique programs in meaningful partnership with local community colleges in the three states we serve to expand our pipeline of diverse, fully qualified and skilled electric and gas utility workers who are technically minded and interested in career advancement.

## Employee Engagement

Our comprehensive employee survey is implemented every two years with supplemental pulse surveys conducted every other year. These surveys provide important feedback from our employees and measure progress on our engagement. We also have an online employee community that provides important feedback about key business topics.

In 2021, we administered a comprehensive employee engagement survey followed by targeted action plans that incorporated employee feedback and addressed areas of opportunity. Additional dialogue was facilitated through our employee BRGs, and we increased manager interactions to ensure employees felt connected to the larger organizational goals and vision.

## Eversource Green Team

Our Green Team is an employee-led volunteer group with more than 100 members across our service territory who join together to share a passion for protecting the environment. The Green Team implements and promotes initiatives it determines are of most importance. In 2021, the team held nine virtual speaker events and a full week of virtual Earth Day events open to all employees to expand knowledge and inspire more sustainable living. Aquarion held three additional virtual speaker events and eight community-based Earth Day projects.

## Safety

"Safety first and always" is an important Eversource core value — for our customers, employees and communities. Our approach is one in which all employees take personal responsibility and are empowered to address hazards before they result in incidents and, when they arise, remain prepared to respond to emergent situations and hazards.

Reducing the potential for safety incidents is always a top priority. In 2021, we modified our field safety job observation process to focus on hazardous energies known to result in serious injury or fatality (SIF) incidents. In 2021, we conducted more than 48,500 field safety observations of both internal and contractor crews to confirm that hazardous situations were properly identified and controlled. We encourage all employees to report any unsafe conditions they encounter; such reports resulted in more than 2,000 potential hazards being addressed in 2021. All opportunities for improvement were documented and tracked to completion.

We continue to roll out components of our Safety Management System (SMS), which includes compliance and safety policies. As part of this effort, an Incident Learnings Policy defined the process on incident identification, learning and improvement while integrating Human and Organizational Performance (HOP) and SIF principles. Applicable lessons learned are shared with employees and at monthly contractor meetings.

Our new Risk Management Policy defines hazard identification and the use of risk assessments to mitigate safety hazards to our employees and our systems. This policy introduces task-specific instructions developed in partnership with front-line employees to provide guidance on mitigating task-specific safety hazards. Finally, the Contractor Safety Policy was revised to ensure that the contents are clear and effective.

To keep our employees, customers and communities safe during the COVID-19 pandemic, we monitored public health guidance and quickly adjusted our COVID-19 safety plans. These efforts minimized potential exposure to COVID-19 for employees, contractors and visitors while we continued our essential work.

In addition to conducting our day-to-day work in the safest manner possible, we also have a responsibility to keep our communities safe. A variety of resources are provided on our website for first responders, emergency management personnel and other groups throughout our service territory. In-person semiannual electrical hazard awareness training for fire and police academies also helps ensure safe and effective practices by first responders when responding to system emergencies.

# WELL-BEING

> **Eversource offers discounted rates for emergency back-up childcare through Care.com, a benefit offered to employees for finding and managing high-quality family care. It's been such a lifesaver for me.**
>
> **– Electric Field Operations Supervisor**

## Wellness and Benefits

We value our employees and we are committed to providing them with a competitive total rewards package. In addition to fair wages and competitive salaries, our employees are offered a wide variety of benefits designed to help keep them and their families healthy and financially secure with coverage options that feature choice, flexibility and tax-savings opportunities.

Employees are also provided with a membership to Care.com, which provides childcare and eldercare services in addition to senior care planning, and they have the opportunity to enroll in a Dependent Care Flexible Spending Account. We also offer employees generous sick and leave programs to support them when they and/or their family members need care. Our Employee Assistance Program (EAP) provides employees with an array of mental health, well-being and career enhancement services, including confidential, short-term counseling, resources, consultation and referrals for emotional and work/life balance issues.

We offer comprehensive health enhancement initiatives and partner with leading digital lifestyle and disease-management providers using mobile technology to deliver personalized care and resources to our employees and their spouses. In 2021, we launched Virgin Pulse, a new digital wellness platform, and Learn to Live, an online behavioral health program to help employees with stress, anxiety, depression, insomnia or substance abuse. Looking ahead, we also plan to roll out a new digital health program, Buoy Health, to further assist employees and their families in finding the medical care most beneficial.

In addition to the benefits we offer employees that contribute to their personal well-being, we also work to make their experience within our facilities a healthy one. In 2021, our Energy Park headquarters in Manchester, New Hampshire, became the first utility site in the nation to achieve Fitwel certification, which recognizes workplaces designed to promote and encourage employee health and well-being. Two additional Eversource facilities are targeted for Fitwel certification in 2022.

**We offer our customers superior service, value and energy solutions through a team of engaged employees always focused on the Three Cs:**

**Three Cs:**

**Communication:**
Provide proactive and timely response to customer requests and helpful information to customers in the manner they prefer.

**Convenience:**
Deliver a personal touch with every customer request along with easy self-service options 24/7.

**Commitment:**
Establish and keep appointments, complete requests, resolve issues according to scheduled dates and times and listen to and incorporate customer feedback to continuously improve.

## OUR CUSTOMERS

Our first priority is to provide our customers with the essential services they expect — safely and reliably delivering electricity, natural gas and water. Every day we strive to go far beyond expectations to provide our customers with excellent service, to be engaged and responsive to their needs, and to enable technologies that will help to reduce regional emissions.

We are also dedicated to operationalizing equity, and we are confident that reliability and equity can be accomplished simultaneously. This requires engaging all stakeholders — including our customers and communities — with integrity, respect and dignity while working toward fair and just outcomes, especially for those burdened with economic challenges, racial inequity, negative environmental impacts and justice disparities.

### Customer Care

Providing transparent and regular communication to our customers is extremely important to us. We provide updates on restorations during service interruptions, deliver important account and billing information, and share details about our services so customers can make informed decisions. And we do our best to communicate with our customers through their preferred channels and languages.

We provide extensive customer outreach through our website (Eversource.com), email, social media, customer bills and direct outreach. Our customers also receive monthly communications that offer timely information about how to save money, stay safe, add payment options and more.

We are meeting our customers where they are — allowing them to engage and speak with our customer service representatives in the language of their choice, reducing confusion and misunderstandings, and delivering an improved experience. We've created Spanish interactive voice response message prompts and recordings, outage alerts through email and text messages, translated webpages, and a myriad of forms, brochures and printed collateral in Spanish. As the first utility in the country offer Spanish-language resources, we have a mobile application in Spanish, and important natural gas safety messages are translated into both Spanish and Portuguese.

We are also unwavering in our commitment to protect our customers' personal information. Our comprehensive cybersecurity program uses in-depth defense strategies consistent with the National Institute of Standards and Technology (NIST) Cybersecurity Framework. This program is overseen at the Board level and includes risk assessments, vulnerability management programs, policy and governance, and a proactive incident response program.

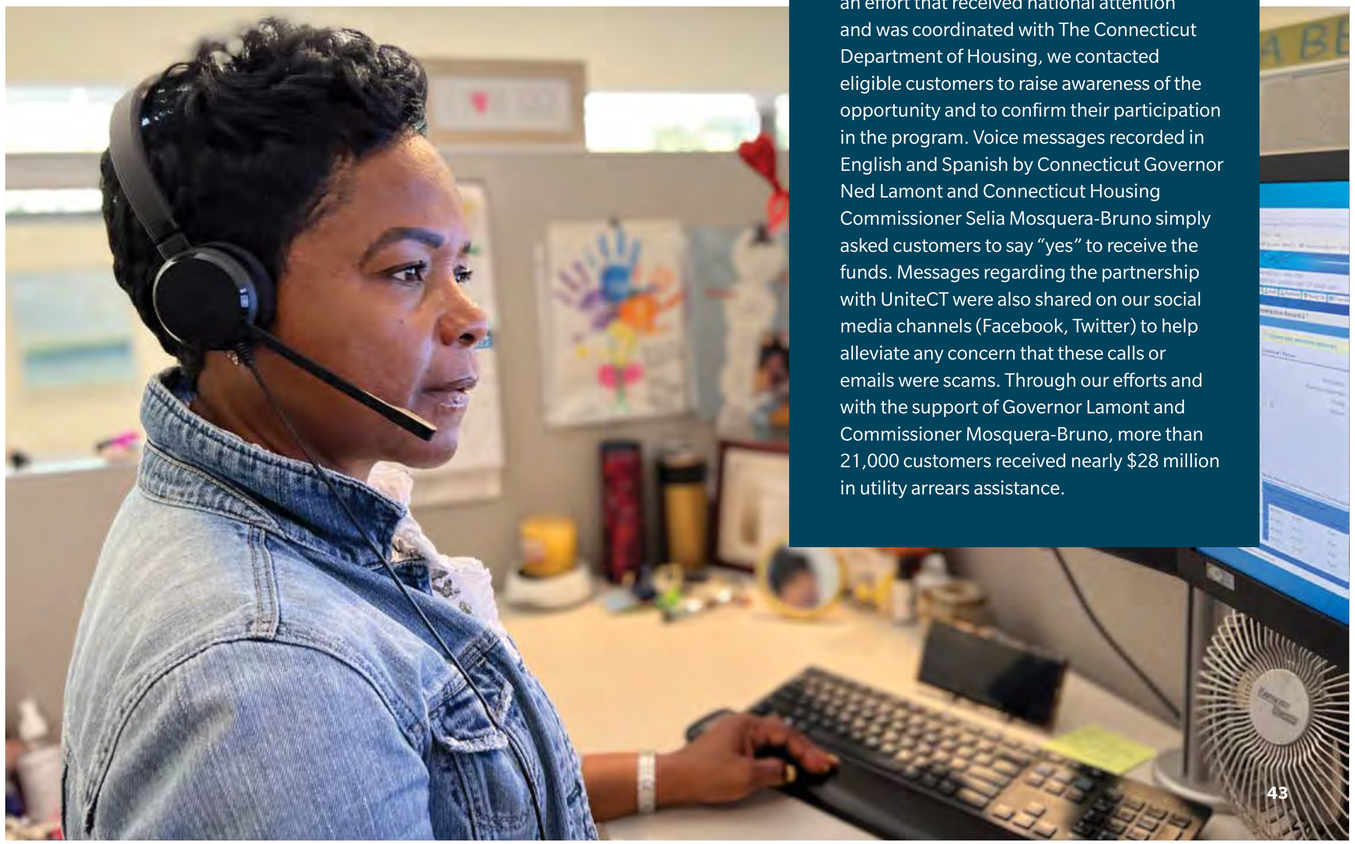
**Contacted eligible customers to confirm program participation** + **Recorded voice messages in English and Spanish** + **Shared partnership information on our social media channels** = **Over 21,000 customers received nearly $28 million in utility arrears assistance**

## Customer Assistance

In 2021, we continued to find innovative ways to connect customers facing financial hardship to our assistance programs and to state and federal assistance. We offer customers a variety of payment plans and programs to help make energy bills more affordable and prevent service disconnection, including balance forgiveness programs, service protection plans and extended payment plans.

We conduct regular outreach to community leaders in cities and towns with the highest numbers of customers who have accounts past due by 60 days or more, and provide specialized toolkits and materials to build awareness of our programs. In 2021, we held 23 webinars in English and Spanish for thousands of registered attendees. In Connecticut and Massachusetts, three bi-lingual paid advertising campaigns targeted communities with the greatest number of customers in need.

Eversource also works with financial hardship customers, offering year-round financial assistance programs, discounted utility rates, services, payment plans and partnerships to help them manage their energy and water costs. During the COVID-19 pandemic, we expanded our financial assistance programs and flexible payment plans; postponed service disconnections for nonpayment; and suspended late payment charges for all residential and commercial customers. More than 67,000 customers benefited from more than $56.3 million of waived debt on their payments in 2021.



### Partnering to Get Financial Assistance to Those in Need

We worked closely with state agencies across our service area to get the word out about emergency rental and utility assistance funds for customers in need. In an effort that received national attention and was coordinated with The Connecticut Department of Housing, we contacted eligible customers to raise awareness of the opportunity and to confirm their participation in the program. Voice messages recorded in English and Spanish by Connecticut Governor Ned Lamont and Connecticut Housing Commissioner Selia Mosquera-Bruno simply asked customers to say “yes” to receive the funds. Messages regarding the partnership with UniteCT were also shared on our social media channels (Facebook, Twitter) to help alleviate any concern that these calls or emails were scams. Through our efforts and with the support of Governor Lamont and Commissioner Mosquera-Bruno, more than 21,000 customers received nearly $28 million in utility arrears assistance.

**$5.8 million**
Contributions to charitable organizations in Connecticut, Massachusetts and New Hampshire

**$1.4 million**
Annual donation to United Way agencies
*(up by $150,000 during COVID-19 pandemic)*

**$330 thousand**
Contributions to communities throughout our three-state area with community grants

## OUR COMMUNITIES

We care about our neighbors, customers and communities, and we are committed to the health and economic well-being and prosperity of the residents, businesses and institutions across our service territory. As a responsible corporate citizen, we provide grants to local nonprofits and are a major sponsor of charitable events and programs. We also have a robust employee volunteer program dedicated to building relationships, effective communication and engagement in our communities.

### Charitable Giving

The mission of the Eversource Energy Foundation is to help build a healthier, stronger, more sustainable and more equitable future for our customers and communities, recognizing the unique and specific needs of underserved and environmental justice communities within our service territory. In 2021, we contributed $5.8 million to charitable organizations in Connecticut, Massachusetts and New Hampshire. And as part of our efforts to support customers and communities during the COVID-19 pandemic, we increased our annual donation to United Way agencies across all three states by $150,000 for a total of $1.4 million.

In addition to grants through the Foundation, our Community Relations team awards impactful community grants that help thousands of citizens in the communities we serve. These grants address critical issues like hunger, homelessness, education, STEM programming, the environment and public safety. In 2021, we awarded more than $330,000 in contributions to communities throughout our tri-state service area. We also established a Charitable Giving State Review Committee in each state to ensure we have diverse perspectives in our grant review and decision-making process.


## Employee Giving and Volunteerism

We take great pride in supporting our employees and community organizations that are making a difference in the neighborhoods where we live and work. Our employees donate their personal time and provide financial support to these important organizations, which is why we match their contributions, enhancing the impact of their generosity.

In 2021, our corporate volunteer programs engaged more than 4,900 employees and their families in volunteering more than 23,700 hours at company-sponsored events. Our signature events helped raise over $2.5 million for charities across New England.

**4,900**
**employees**

volunteered
**23,700**
**hours**

raised
**$2.5 million**
for charities across
New England

## Community Relations

Fostering long-standing, professional relationships with community leaders helps us leverage the full benefit of our operational, safety and advocacy experience to support the needs of the communities where we operate. Our Community Relations team serves as the primary point of contact and the face of Eversource for state and local government officials and business leaders. Throughout the year, our strong relationships help maintain important two-way communications with the municipalities we serve and position us as a go-to resource for distributing key company information. Our efforts include helping municipalities with low-income and energy efficiency programs, providing updates on energy-related projects, and helping to resolve local issues and concerns.

We also work closely with municipal leaders to train first responders and to identify critical infrastructure, such as hospitals, police and fire stations, 911 dispatch centers, and water treatment facilities as critical facilities to monitor and prioritize during outage events. During emergency events, impacted communities are assigned an Eversource community liaison, who conducts proactive outreach and addresses specific community needs.

In 2021, we rolled out a new, web-based Municipal Hub site that offers municipal officials improved two-way communications. Available 24/7, this site can be accessed to provide and receive essential information. During emergency events, municipalities can report outages and set community priorities while receiving timely updates from us on events, the estimated time of restoration and other critical details. The Municipal Hub site serves more than 500 communities across our service territory. We offered virtual, in-person and computer-based training to encourage participation.

## Economic Benefit

We are committed to engaging in activities that create economic growth, benefit our region and support our communities. Our efforts include the employment of more than 9,000 people across New England, grants for local economic and community development initiatives, the development of cost-effective renewable energy projects, and our award-winning energy efficiency programs. We accomplish this through community outreach, participation in local business organizations and economic development groups, investments in community initiatives and tax credit programs that help revitalize communities, and support of new businesses and workforce development through investments in STEM education and partnerships with local colleges and universities.

In addition to our other charitable giving, we are proud to support Connecticut tax credit programs that enable the development of low-income and supportive housing and the preservation of historically significant properties. In 2021, these charitable contributions totaled nearly $20.9 million.

# Governance

# Leading Responsibly

## STRONG CORPORATE GOVERNANCE

Our business activities are overseen by our Board of Trustees, with the goal of enhancing long-term value for shareholders while also fulfilling our customer, commercial, community and public service obligations. The Board is elected by the shareholders to oversee management and to ensure that the long-term interests of the shareholders are being served.

Signifying the importance of sustainability and our vision to lead our industry in ethical and responsible business practices, our Board of Trustees Governance, Environmental and Social Responsibility Committee provides primary oversight for our company's environmental, human capital management and social responsibility programs and performance.

One of the key measures the Board uses to ensure continuous advancement of our ESG performance is an internal goal to remain among the top in our industry with regard to key external ESG ratings used to inform our investors and other stakeholders. In 2021, we exceeded this goal to rank in the top 15% among an internal peer group of comparably sized U.S. utilities.

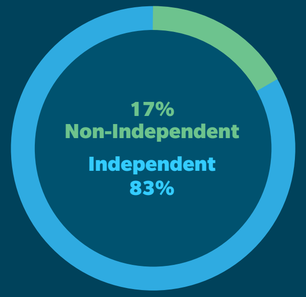
### Board Composition

Many of our Trustees serve or have served as senior executives or directors of other companies, providing us with unique insights. These individuals possess extraordinary leadership qualities and the ability to identify and develop those qualities in others. They demonstrate a practical understanding of organizations, processes, long-term strategic planning, risk management and corporate governance — and know how to help Eversource drive change and growth.

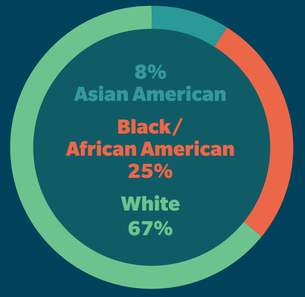
We believe diversity of experience and thought are valuable attributes in members of our Board. Our Corporate Governance Guidelines also identify diversity as an important consideration when considering Trustee candidates, including gender, ethnicity and personal background.

## Board Composition

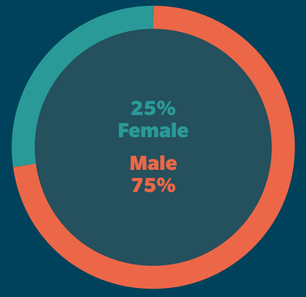
### independence




### ethnic diversity




### gender diversity




### tenure


Of our twelve Board members, ten are independent, ten have served on the Board for ten or fewer years, three are women, and four are persons of color.

# Together with our diverse suppliers, we are expanding business opportunities, advancing suppliers' visibility and growth goals, and creating valued business relationships

## Supply Chain Management

We are promoting sustainable practices within our supply chain by establishing strategic relationships with responsible suppliers that are committed to safety and the environment. In 2021, this included piloting an enhanced supplier survey that measures supply chain sustainability initiatives and will be used to identify opportunities for improvement. Based on the pilot's success, we plan to expand the survey to more key suppliers in the coming year and engage suppliers as we identify areas for improvement.

We require all vendors to adhere to our Supplier Code of Business Conduct, which includes expectations for ethical behavior, a commitment to the health and safety of their workers, treating their employees fairly and with respect, and operating in compliance with human rights laws. Our procurement selection process also includes an assessment of each vendor's response to inquiries about their environmental, social and governance activities. Our Supplier Relationship Management Program ensures that we work collaboratively with our critical suppliers to drive value, reduce risk and strengthen our competitive position through formal assessments and reviews.

## Supplier Diversity

We provide diverse suppliers the maximum practicable opportunity. Together with our diverse suppliers, we are expanding business opportunities, advancing suppliers' visibility and growth goals, and creating valued business relationships. We are committed to the active inclusion of small and diverse businesses in our supply base, which collectively represented more than $675 million of our supplier spending in 2021. In the past three years, our Supplier Diversity Program has increased its spending with diverse suppliers — supporting jobs for underrepresented groups in the energy industry across Connecticut, Massachusetts and New Hampshire.

At the outset of the pandemic, we implemented Contractor Safety Standards to protect our suppliers and employees while ensuring access to critical materials. We worked tirelessly to secure necessary personal protective equipment, such as face masks, nitrile/latex gloves, face shields, hand sanitizer, handwashing stations, antibacterial soap, thermometers and temperature scanners.

## Stakeholder Engagement

Eversource participates in industry groups and collaborates with nonprofit organizations, as well as with our regulators, to identify best practices, address challenges and collectively drive progress on sustainability issues.

It is imperative to our business success to consider the interests of our internal and external stakeholder groups. To do this, we maintain open dialogue and remain prepared to adapt our practices in response to stakeholder needs. In 2022, we are fostering engagement with our stakeholders as part of a comprehensive materiality assessment, the results of which will be shared in our next sustainability report.

### Examples of 2021 engagement:

Together with the Edison Electric Institute (EEI) and the American Gas Association (AGA), we helped develop the **ESG Reporting Template** to standardize ESG disclosures across our industry.

We participate in the **Electric Utility Industry Sustainable Supply Chain Alliance**, an organization of utilities and suppliers working together to advance sustainability best practices in utility supply chain activities and supplier networks.

We also participate in **industry review of federal climate laws** and support both national and international programs addressing climate change.

Our support of several environmental regulators and nonprofit organizations has driven **important stewardship initiatives** such as improving the protection of osprey, rare species and other wildlife habitats.

# TRANSPARENT

## Transparency

Acting with transparency, honesty and integrity is fundamental to Eversource's values and underpins our ESG initiatives. Our stakeholders are interested in understanding how we manage our business and uphold our commitment to sustainability, including information on our risks and opportunities, financial health, and ESG performance. Providing transparent and regular communication on these topics is extremely important to meet the expectations of our stakeholders and invite open dialogue.

The mechanisms we use to deliver this important information come in many forms, including our financial disclosures, regulatory filings, sustainability reporting and digital channels, such as our website, social media channels and customer communications. We also engage with customers, community members, environmental groups, regulatory agencies, and civic and business partners through proactive outreach.

## Ethics

Eversource is built upon a foundation of strong ethical corporate values and business practices.

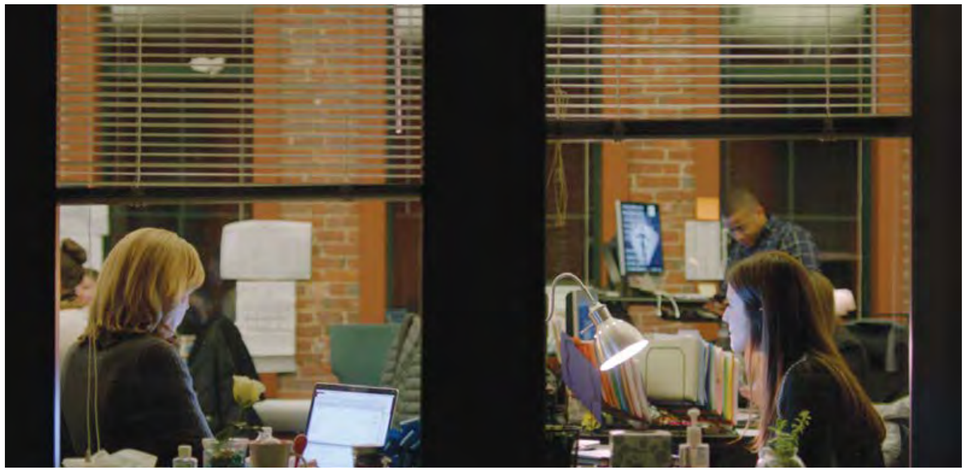
Our President and Chief Executive Officer established our tone at the top and expectations around the importance of conducting business ethically, with integrity and in conformity with the Eversource Code of Business Conduct (CBC). Our leadership team and Chief Compliance Officer (CCO) strongly reinforce these ethical expectations and promote an organizational culture that reflects a commitment to compliance with the letter and spirit of the laws, regulations, policies and standards applicable to our business. The Audit Committee of the Eversource Board of Trustees oversees our Corporate Compliance Program (CCP) and mission to ensure that our employees embody a culture of compliance, and the company prioritizes compliance with laws and regulations that apply to Eversource.

Our CCP is a comprehensive, multilayered, enterprise-wide program where compliance is everyone's job, every day. Our CCP is effective and is based on:

- *Strong support from senior management, including the Board of Trustees.*
- *Standards and procedures, including a strong Code of Business Conduct and Enterprise and Business Level policies and procedures.*
- *An organizational structure that embeds compliance in every area of the business.*
- *Internal controls designed and periodically reviewed and tested to ensure that we comply with applicable state and federal laws, regulations, policies and standards.*

All Eversource trustees, officers and employees must abide by the principles of our CBC, which applies the same high ethical standards to all, regardless of job or level in the organization. Additionally, our Board has adopted a Code of Ethics for Senior Financial Officers, a Related Party Transactions Policy, a Political Activity Policy and a Financial Disclosure Policy. These policies and the Code of Business Conduct, together with our corporate policies, collectively address day-to-day activities and reflect our commitment to ethical, respectful and transparent conduct.

**Our Code of Business Conduct applies the same high ethical standards to all, regardless of job or level in the organization**



# Our Code of Business Conduct establishes and communicates our values and behavioral guidelines and:

- Provides information on compliance
- Describes how to raise concerns about inappropriate conduct
- Assigns accountability
- Outlines ethical business conduct and expresses the expectation that everyone covered by the CBC act with honesty and integrity
- Identifies available ethics and compliance resources and sets forth the company's commitment to prevent and prohibit retaliation against anyone raising a good faith concern of noncompliance or unethical conduct

Our senior level enterprise-wide Compliance and Ethics Committee (CEC), chaired by the CCO, provides oversight for the periodic review, update and implementation of our CCP to ensure that our employees embrace a culture of compliance and our businesses engage in ethical business conduct and adhere to applicable laws, regulations, policies and standards. The CEC and CCO annually review key compliance topics and issues that could materially impact us, oversee the development and implementation of mitigation plans and controls, and oversee the ongoing assessment and monitoring of the effectiveness of the mitigation plans and controls to ensure ongoing compliance. The CEC also serves to reinforce the tone at the top and emphasize the importance of ethical conduct and decision-making.

The CCO regularly reports to the Executive Vice President and General Counsel and provides periodic updates to senior management on the CCP and compliance activities. The CCO also provides an annual report on the status of the Eversource CCP to the Audit Committee of the Board, summarizing the CEC's work for the year and confirming that we demonstrate ethical corporate conduct, adhere to applicable laws and continue to maintain an effective system of internal controls, and that employees demonstrate a culture of compliance.

All officers and employees receive periodic communication and annual mandatory training on the CBC, which serves as the foundation of our compliance culture. In addition, all Eversource officers receive communication and training on other important corporate policies, such as Anti-Corruption & Anti-Bribery, Antitrust & Fair Competition, Conflict of Interest, Fraud Prevention & Detection, Prevention of Discriminatory Harassment and Fitness for Work. Our Corporate Compliance Hotline is operated by an independent third party (NAVEX) and can be accessed by employees or third parties 24 hours a day, seven days a week to report known or suspected compliance and/or ethics violations, with the option of raising such concerns on an anonymous basis. The Compliance Hotline is intended to complement in-person, phone or email reporting to managers, supervisors, the Chief Compliance Officer or Human Resources.

## Risk Management

The Board, both as a whole and through its committees, is responsible for the oversight of our Enterprise Risk Management (ERM) program. This program applies a well-defined enterprise-wide methodology to identify, categorize, prioritize, mitigate and monitor principal enterprise-wide risks, including in key areas such as environmental, social and governance, operations, information technology, compliance, business continuity, and emerging risks. The ERM program is integrated with other assurance functions throughout the company, including Compliance, Auditing and Insurance. Risks are analyzed to determine materiality, likelihood, impact and velocity, and to develop formal, actionable mitigation strategies. Major risks are disclosed in our annual report on 10-K, and the Board's oversight of the company's risk management processes and programs is disclosed in our annual proxy statement.

Our Finance Committee has primary responsibility for cyber and system security oversight and regularly reviews reports focused on the changing threat landscape and how we are mitigating risks to the company.

## Our Internal Audit Process

Our Internal Audit Department (IAD) strives to support the company's management to best conduct its operations and adapt to an ever-changing business environment. IAD helps ensure that:

- *Controls and risk management activities are designed adequately and operating effectively.*
- *Resources are acquired economically, used efficiently and protected adequately.*
- *Business programs, plans and objectives can be achieved.*
- *Quality and continuous improvement are fostered.*

The IAD maintains independence by reporting to the Vice President Internal Audit & Security, who reports administratively to the Executive Vice President and General Counsel and functionally to the Audit Committee of the Board of Trustees.

Annually, IAD develops a flexible audit plan using an appropriate risk-based methodology, including any risks or control concerns identified by management and corporate compliance. The plan is reviewed and approved by executive management and the Audit Committee of the Board of Trustees.

**IAD performs the following categories of audit work:**

- *Financial, operational, IT and compliance audits to review the effectiveness and efficiency of policies and procedures, reliability of financial reporting, compliance with laws and regulations, and safeguarding of assets.*
- *Environmental compliance audits to assess company facilities and environmental records for compliance with federal, state and local environmental regulations. The team also performs an audit of the annual Sustainability Report, process audits (to evaluate environmental compliance over multiple functions), vendor audits (to evaluate the environmental risks to Eversource of vendors and contractors), and substation audits (to review the process of maintaining electrical equipment in substations).*
- *Investigations of Corporate Compliance Hotline calls or concerns raised by management regarding alleged or suspected wrongdoing and improprieties.*
- *Sarbanes-Oxley program planning, testing and project oversight to comply with Sarbanes-Oxley §404 requirements.*
- *As requested, provide internal controls training and consulting, perform or participate with a cross-functional team to assess a given process or area, and participate on various task forces and special projects.*

The Institute of Internal Auditors (IIA) is the governing body over internal audit practices and requires Internal Audit functions to have a five-year Quality Assessment Review (QAR). The IIA provides internal audit professionals worldwide with authoritative guidance organized in the International Professional Practice Framework as mandatory and recommended guidance. The most recent QAR performed by the IIA was in May 2020. The IIA found that the Eversource IAD generally conforms with the Standards and the IIA Code of Ethics. This level of conformance is the Top Rating and demonstrates a clear intent and commitment to achieving the Core Principles and the Definition of Internal Auditing. The IIA concluded that the IAD operates effectively in a very dynamic environment with changing and emerging risks.

## FINANCIAL PERFORMANCE

Our credit ratings have remained among the best in the industry, resulting in a net benefit for our customers and communities, as we are able to access the funds needed to invest in our energy and water delivery systems in an effective manner. Institutional investors also rated us one of the top U.S. utilities related to executive leadership, sustainability and investor relations.

We consistently strive to provide top-tier service quality and reliability to our customers and deliver strong financial performance for shareholders. In 2021, we reported recurring earnings per share of $3.86, an increase of 6%, and increased the common dividend paid to shareholders to $2.41, an increase of 6.2% over the $2.27 paid in 2020.

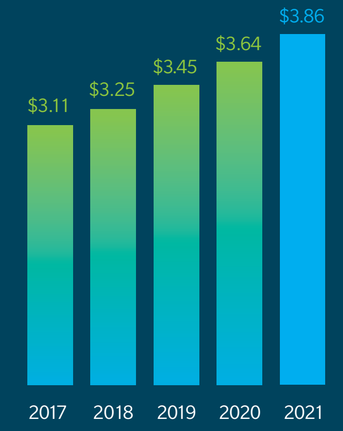
Sharing the perspective of many investors, we believe the financial sector plays an important role in keeping companies like Eversource accountable for responsible and best practices. As such, we are proud when discerning investors managing socially responsible or green bond funds choose to include Eversource in their portfolio.

By the end of 2021, our shares were held by 201 funds based in North America or Europe that are either dedicated socially responsible funds or part of a family of funds that screen stocks for ESG attributes before certifying them for investment.

In May 2021, we completed the third issuance of $300 million of green bonds through our NSTAR Electric subsidiary, which financed eligible green expenditures. Proceeds were used to supplement the funding of our energy efficiency programs for electric customers in Massachusetts.

### Diluted Earnings Per Share

*(Non-GAAP)* [1]




### Dividends Paid Per Share


1 Diluted Earnings per Share for 2021 (Non-GAAP) was adjusted to exclude an after-tax charge of $0.25 per share related to the settlement of multiple regulatory dockets concerning Eversource Energy subsidiary, The Connecticut Light and Power Company, and after-tax transition-related costs of $0.07 per share associated primarily with the acquisition of the natural gas assets of Columbia Gas of Massachusetts. Diluted Earnings per Share (Non-GAAP) for 2020 was adjusted to exclude after-tax acquisition-related costs of $0.09 per share associated with the aforementioned acquisition. Diluted Earnings per Share (Non-GAAP) for 2019 was adjusted to exclude an after-tax impairment charge of $0.64 per share related to the Northern Pass Transmission Project.

## Awards and Recognition

We continue to receive national and local awards that acknowledge us as a leader in sustainability.

- Again included in Newsweek magazine's annual ranking of the Most Responsible Companies based on ESG performance as well as a public survey.
- Remained in the top 100 of America's Most Just Companies by JUST Capital, which recognizes public companies for their positive impact and leadership on priorities such as ethical leadership, environmental impact, customer treatment, shareholder return, fair pay and benefits, and equal opportunity.
- Selected again for inclusion in Bloomberg's Gender-Equality Index for our commitment to transparency in gender reporting and promoting women's equality in the workplace.
- Recognized as one of America's "best employers for diversity" by Forbes magazine, which surveyed over 50,000 U.S. employees regarding age, gender, ethnicity, LGBTQA and diversity in their current workplace.
- Again selected as a "most honored" company by Institutional Investor magazine in its survey of some 1,500 portfolio managers and investment analysts. Eversource was designated one of the top three utilities in each of the eight survey categories, including the #1 ranking for our Investor Relations officer.
- Recognized by the Salvation Army of Massachusetts with the "Others Award," the highest honor given by the Salvation Army to an individual or organization exemplifying an extraordinary spirit of service to "others."
- Recognized as a 2021 Healthiest Employers® of Connecticut. Healthiest Employers® is a trusted awards program that recognizes people-first organizations taking a more proactive approach to employee health.
- Winner of the 2021 WorkWell Massachusetts Award in the Largest group category from the Worksite Wellness Council of Massachusetts, which celebrates employers committed to the well-being of their workforce and the community.
- Ørsted and Eversource received the Corporate Team of the Year Award from Long Island Business News.
- The System Planning Engineer for the Provincetown Battery Energy Storage project received an award from the Edison Electric Institute.
- Recognized by Boston Business Journal as a top Corporate Contributor in 2021.
- In 2021, Aquarion received the Diversity & Inclusion Award from the Connecticut Section of the American Water Works Association.
- Aquarion was rated a Top Workplace by Hearst Media in the midsize category in 2021.

# Appendix

# Data Verification and Report Assurance

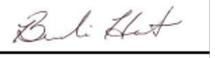
## Independent Verification of Greenhouse Gas Emissions

TRC

**Eversource Energy – North America**
**Greenhouse Gas (GHG) Verification Summary** 16 May 2022

**Name:** Eversource Energy – GHG Verification Summary

**Prepared By:** Brandi Hart
Senior EHS Specialist

**Signature:** 

**Emissions Inventory:**
The verification of Eversource Energy's (Eversource) enterprise-wide operations included all of Eversource's greenhouse gas (GHG) contributors in Connecticut, Massachusetts, and New Hampshire, and fleet transportation for all of the above. The operations in these states comprise the whole of Eversource's operations, and thus all of their GHG contributors.

The GHG emissions inventory for Eversource's operations is comprised of: Scope 1 direct emissions from fuel combustion, sulfur hexafluoride ($SF_6$) usage, gas distribution leaks, and fleet transportation; Scope 2 indirect emissions from line loss and total purchased electricity, steam, and chilled water. TRC has verified all of the total Eversource GHG emissions for 2021 from Scope 1 and Scope 2 emissions.

Boundaries include wholly-owned business entities and owned/leased facilities and energy infrastructure in Connecticut, Massachusetts, and New Hampshire for which Eversource exhibits operational control. Emissions include carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$) from direct combustion, $CO_2$ and $SF_6$ from process sources, and carbon dioxide equivalents ($CO_2e$) emissions from indirect electricity generation. The Eversource operations have no perfluorocarbon (PFC) or nitrogen trifluoride ($NF_3$) emissions.

**Greenhouse Gas Management Plan:** Eversource follows the GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition, with a centralized approach to quantify GHG emissions. Primary fuel and energy data are compiled from direct meter reads, invoices, accounting systems, and other sources into two main data collection spreadsheets. The regional totals from these spreadsheets and other supporting documents, along with fleet data, are entered into the master GHG Inventory spreadsheet which is managed by the corporate environmental team for quality assurance, emissions calculations, reporting and verification. The system uses published fuel-based emission factors to calculate Scope 1 GHG emissions from fuel combustion, $SF_6$ usage, gas distribution leaks, and fleet transportation sources. Scope 2 $CO_2e$ emissions are calculated using 2020 eGRID emission factors (i.e., most recent available).

**Verification Level of Assurance:**
Limited Assurance: A "Limited Assurance," following the ISO 14064-3 *Greenhouse Gases - Specification with guidance for the validation and verification of greenhouse gas assertions,* is appropriate for basic GHG reporting and for voluntary reduction efforts where there are no imminent requirements or compliance obligations associated with GHG reductions. This is the case for Eversource's operations as direct GHG emissions from their operations are not covered by any existing (or pending) regulatory requirements for GHG emissions limitations. A Limited Assurance is intended to establish the basis for stakeholder reporting and external communications; support claims of carbon neutrality, and for credit for early action; and to enable assessments of performance of GHG reduction initiatives towards voluntary targets. Given the status of the Eversource operations' emissions inventory and management system, a Limited Assurance as defined in the ISO 14064-3 Standard is appropriate for this project. This verification covers the calendar year 2021 GHG emissions inventory for the operations listed above.

**Eversource Energy – North America**
**Greenhouse Gas (GHG) Verification Summary** 16 May 2022

**Summary:**
Based on the inventory of GHG data sources and emissions compilations for Eversource's operations and fleet transportation, the information submitted by Eversource is consistent with the Eversource Energy GHG Monitoring Plan. The GHG Monitoring Plan is based upon the GHG Protocol Corporate Accounting and Reporting Standard and is consistent with the WRI/WBCSD GHG accounting and reporting protocol.

Eversource's 2021 assertion of GHG emissions from Scope 1 direct and Scope 2 indirect sources is a total of 709,877 metric tonnes of $CO_2e$ emissions, including 158,494 metric tonnes of Scope 1 $CO_2e$ emissions, and 551,382 metric tonnes of Scope 2 $CO_2e$ emissions. Based on its review of Eversource's 2021 GHG emissions inventory for all emitting sources, including fleet operations, as identified above, TRC has found minor clerical and transcription errors which do not significantly affect the reported results, and which were corrected. TRC has found no evidence that the GHG assertion is not materially correct, and no evidence that Eversource's assertion is not a fair and accurate representation of Eversource's actual GHG emissions, with a "Limited" level of assurance according to the ISO 14064-3 Standard.

**Verifier Qualifications:**
TRC was retained by Eversource Energy to provide independent third-party verification for energy use and GHG reporting for Inventory Year 2021 for submittals in 2022. TRC's GHG experts are qualified and experienced in performing both "Reasonable" and "Limited" assurance engagements and have familiarity and expertise in GHG programs, reporting platforms, and protocols including: Carbon Disclosure Project (CDP), World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) GHG Protocol, and ISO 14064-3 Specification with Guidance for the Validation and Verification of Greenhouse Gas Assertions Standard.

Brandi Hart provided senior level oversight and management for this project. Brandi has 18 years in industry experience and consulting, including the implementation and daily management of ISO/RC systems and extensive management systems auditing experience as a certified ISO 14001 and 9001 auditor. She has managed multi-media environmental programs (air, water, waste), including both permitting and compliance, as well as the industrial hygiene and safety programs at various sites, and is experienced in assisting with the development of global sustainability measures and both designing and implementing programs at the site/local level to support the company's sustainability objectives and targets, including GHG reduction.

Stephanie Warden served as the lead verifier for this project. Stephanie is an environmental engineer with 6 years of experience in environmental and sustainability consulting. She has performed GHG verifications on Scope 1 and 2 emissions for multiple individual facilities and multi-national corporations.

The technical review and quality assurance/quality control (QA/QC) for this project was conducted by Walt Williams. Walt has spent four years in the environmental and sustainability fields. His experience primarily lies in greenhouse gas quantification and air permitting and compliance. Walt has helped clients develop Scope 1 and 2 quantification and verification frameworks for over 1,000 facilities across the pulp and paper, oilfield services, chemical manufacturing, and airfield services industries. Walt has also completed comprehensive Scope 3 quantification frameworks totaling nearly ten million metric tonnes of CO2e.

## Internal Report Assurance

The Eversource Internal Audit Department performed a review of the 2021 Eversource Sustainability Report and submitted the following statement:

"Based upon our review, we found the information in the Report is fairly presented. We selected and reviewed a sample of sustainability topics from this Report. A comparison of the information was made to the Global Reporting Initiative Standards and interviews were held with selected key management and staff responsible for the preparation and approval of the information presented in the Report. In addition, separate from this review the Eversource Internal Audit Department performs periodic audits of departments responsible for controls over business processes that are responsible for producing data used in this report. Based on these audits, we are not aware of process or control issues that would materially impact the data integrity of the Eversource Sustainability Report."

# Material Topics & Alignment with United Nations Sustainable Development Goals

In 2018, Eversource completed a review of material topics identified through existing processes that have potential environmental, social, or economic impact related to our business practices. Additionally, we validated who our key stakeholders are and how we engage with them and consider their expectations in our strategic planning processes. On an annual basis, we verify that all risk factors identified in our annual reports are addressed in our material issues and verify that topic scopes and boundaries are still accurate.

Consistent with best practices and to ensure we are focusing our sustainability initiatives in the areas that will have the greatest impact, in 2022 we will take a fresh look at materiality through a comprehensive assessment. This evaluation will include engagement with internal and external stakeholders to gain their perspectives. The resulting list of highly material topics will guide our sustainability strategy and reporting, including ensuring the appropriate key performance indicators, goals, policies and management approaches are adopted.

We have robust processes in place to regularly assess risks and opportunities, emerging issues and stakeholder concerns. These include topics that our Disclosure Committee determines are material to investors for inclusion in our financial reports, significant issues identified through our Enterprise Risk Management process, as well as our senior team priorities and key performance indicators. Our Sustainability Team reviewed all of these sources to define our material topics and their scope through a sustainability lens to facilitate reporting.

Continuous engagement with external stakeholders is vital to the success of our business. We engage with a variety of stakeholder groups, including customers, community groups, shareholders, potential investors, regulators, environmental stakeholders, employees, retirees, labor unions, contractors and others in our supply chain, as well as various professionals in academia, industry and government. These important relationships inform internal discussions and guide our planning and anticipation for stakeholder expectations. From shareholder meetings, community outreach and customer satisfaction surveys to social media, project partnerships and regulatory proceedings, we hear the voice of our stakeholders and incorporate their concerns into our planning and decision processes.


Following is a list of our material sustainability topics, their scope and boundary and mapping to the United Nations Sustainable Development Goals.

*The use of the term "materiality" in this report differs from financial materiality, which describes matters or facts that would have a substantial likelihood to be deemed important to a reasonable investor making an investment decision.*

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Greenhouse Gas Emissions | Implementing initiatives to reduce GHG emissions in our operations and support regional targets<br>• Facilitating integration of renewable and low-carbon energy in the region<br>• Expanding natural gas capacity<br>• Actions to reach our goal to be carbon neutral in our operations by 2030 | • Entire company focus<br>• Customers, service territory communities, investors, regulators | 7, 13 |
| Environmental Accountability | Conducting business in a manner that protects and enhances the environment and fosters environmental stewardship<br>• Environmental compliance<br>• Air quality<br>• Waste management<br>• Remediation programs | • Entire company focus<br>• Regulators<br>• Service territory communities<br>• Select external stakeholder groups | 6, 12, 15 |
| Water | Maintaining water quality and availability<br>• Water conservation<br>• Maintaining water quality<br>• Reservoir dam infrastructure | • Aquarion focus<br>• Customers, service territory communities, regulators, legislators | 6, 9 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

Our Environmental Management System (based on ISO 14001) guides us in our pursuit to protect the environment every day through continuous improvement of our environmental practices. Specifically, we focus on:

- Minimizing air emissions and addressing climate change through our Carbon Neutrality goal
- Reducing waste generation with a focus on reuse and recycling
- Addressing the impacts of our business on the environment, including remediation of spills and releases
- Conserving and protecting water resources, particularly with our subsidiary Aquarion Water
- Responsibly managing natural lands and protecting biodiversity

Along with our Environmental Policy, we have formal procedures and a task-scheduling system in place to ensure environmental compliance. Environmental training is provided to employees based on job function. Legal and Environmental teams meet quarterly to review and address compliance issues. The Board's Governance, Environmental and Social Responsibility Committee also provides oversight.

We effectively identify and address potential environmental risks through our Enterprise Risk Management (ERM) program, in addition to rigorous audits of our facilities, vendors and processes. Our environmental auditor has been certified by the Institute of Internal Auditors and corrective actions are tracked to ensure continual improvement. Progress toward completion of goals is reported to management by the Corporate Performance Management Team each month.

Considerations for potential environmental impacts are communicated during monthly and quarterly organizational work plan meetings and formal project assessments. Project management and community relations teams also proactively meet with stakeholders to review planned work and communicate our commitment to environmental stewardship. Contractors working on our behalf may receive project-specific training regarding wetlands, endangered species and cultural resources. In 2021, we launched an internal cross-functional Pro-Equity Advisory Team that is tasked with developing strategy, guidelines, leadership toolkits, training materials and decision frameworks to ensure our business decisions are anchored in equity. As we plan projects, programs and services for our customers, we are focused on ensuring fairness, meaningful communication and increased outreach and engagement.

We are committed to minimizing the generation of hazardous waste. For the hazardous waste that is generated, we utilize licensed environmental vendors for safe and timely transport, treatment, recycling and disposal. These vendors are selected based on geographic proximity to reduce travel time/emissions and facilitate rapid response, including at times of emergencies. Employees and vendors responsible for hazardous waste management are RCRA and HAZWOPER trained to ensure proper and safe management.

When planning environmental investigations and remediation of impacted properties, we work closely with municipalities and environmental regulators to ensure that our plans meet their expectations while protecting human health and the environment. Our projects are managed by Eversource staff and vendors that include Massachusetts Licensed Site Professionals (LSP), Connecticut Licensed Environmental Professionals (LEP), New Hampshire Professional Geologists (PG), Professional Engineers (PE) and Certified Hazardous Material Managers (CHMM).

Projects that may be located in the vicinity of regulated resource areas (wetlands, waterways) are permitted to address local, state and federal requirements. In many cases, our remedial strategies are designed to address opportunities for beneficial reuse of the property. Remediation strategies include technologies that promote the treatment/recycling of wastes and in cases where waste must be transported off-site, we utilize licensed facilities to properly manage the wastes.

At Aquarion, we are committed to ensuring that the water supply remains sufficient today and into the future through our water conservation efforts, energy efficiency, system expansions and sustainable management of land and natural resources. Our Water Supply Plan, approved by the Connecticut Department of Public Health, uses data such as current and projected population, estimated current and future water use and water availability to ensure capacities are sufficient to meet customer requirements. Water conservation plans and the protection of water quality is of primary concern and our first effort in any project is to avoid impact to waterways. We conduct extensive water testing and results are reviewed by health agency regulators monthly, with annual water quality reports provided to customers. We strive to reduce water use in our own operations and work with customers to implement conservation programs to ensure that critical needs, such as human consumption and fire protection, are met. In accordance with our regulatory permits, we recycle effluents from our Aquarion business to return process wastewater through the water treatment process.

With a longer-term view, we engage the communities we serve to mitigate threats on water supply resulting from development. Aquarion focuses on all phases of water conservation from production, meter accuracy, leakage, education and communications to water resource planning and preparation of water conservation plans. The purpose of our conservation efforts is to:

- Monitor company activities and programs to assure adherence to written plans and regulatory compliance
- Improve existing conservation programs
- Develop model conservation programs and plans
- Provide better value for our customers by using less water to meet the same needs
- Lower water rates by judicial allocation of capital resources between capacity development and infrastructure improvements
- Reduce the amount of power and chemicals used in the water treatment and distribution process
- Minimize environmental impacts by reducing withdrawals from the environment

Aquarion's dams are a vital asset for Connecticut's water supply. We meet or exceed state requirements for inspection and the provision of Emergency Action Plans. We perform table-top emergency response exercises with the communities downstream of our dams and have an active program for both routine maintenance and the significant capital investment needed to keep these vital assets safely in service. In 2021, we obtained a modification to our Southwest Connecticut Regional Pipeline Diversion Permit. This will ensure adequate public water is supplied to the region and will improve drought resiliency, while enabling ecological flow releases from Aquarion's dams in compliance with Connecticut Department of Energy and Environmental Protection's Streamflow Standards and Regulations.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Community Engagement | Activities benefiting the communities we serve<br>• Corporate giving<br>• Volunteerism<br>• Economic benefit<br>• Community outreach | • Entire company focus<br>• Service territory communities<br>• Select external stakeholder groups | 3, 4, 9 |
| Customer Satisfaction | Meeting customer expectations for delivering reliable energy and superior customer service<br>• Customer communications<br>• Problem resolution mechanisms<br>• Outage restoration<br>• Billing options<br>• Energy affordability | • Entire company focus<br>• Customers, regulators | 7, 16 |
| Emergency Preparedness | Ensuring comprehensive emergency preparedness and response<br>• Preparation for all hazards<br>• Storm response<br>• Outage management<br>• Stakeholder communications and partnerships | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 13 |
| Energy Efficiency | Providing energy-efficient solutions for our customers and maximizing energy efficiency in our own operations<br>• Electric and gas efficiency programs offered to residential and business customers and communities<br>• State partnerships<br>• Facility improvements | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 7, 13 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

We continuously work to improve customer experience by delivering new customer service solutions and enhancing the ways our customers interact with us to provide optimal service. We offer year-round financial assistance programs, payment plans and partnerships to help customers manage their energy costs, as well as programs related to COVID-19.

We conduct constant customer research across all segments of the business to ensure customers' views and sentiments are front and center throughout the company. We ensure all best practices are followed to gather accurate and actionable data. By conducting several daily surveys and hundreds of topic-specific research projects, we continually have a finger on the pulse of how we are performing for customers. This data is brought to the forefront of company leadership in the form of results dashboards updated in real-time and regular email newsletters and communication that highlight the most impactful satisfaction metrics and sentiments among customers. Results are used to help communicate information most important to our customers and to implement initiatives that make it easier for customers to do business with us.

We serve the communities where we live and work in numerous ways, including offering educational curriculum for students of all ages as well as training and workforce development opportunities for adults. We also work with community action agencies in all three states to connect low-income customers with energy efficiency solutions, which in most cases are provided free of charge to qualified customers. In response to the continuing calls for racial and social justice, we elected a Vice President of Corporate Citizenship and Equity and launched a 15-member cross-functional pro-equity advisory team tasked with developing a strategy, guidelines, leadership toolkits, training materials and decision frameworks to promote equity in siting, customer-facing programs, procurement and philanthropy.

Our Board of Trustees supports and encourages community involvement and development and philanthropic goals and activities. The Eversource Energy Foundation, Inc. was established in 1998 to focus on our community investments and to provide grants to our nonprofit community partners. Consistent with our business strategy and core values, the Foundation invests primarily in projects that address issues of economic and community development and the environment. We target charitable giving to ensure the greatest community benefit and are the signature or major sponsor of charitable events including the Special Olympics Connecticut Winter Games, the Eversource Walk for Boston Children's Hospital, the Eversource Walk & 5K Run for Easterseals New Hampshire, the Eversource Hartford Marathon and Half Marathon and the Mass General Cancer Center Eversource Everyday Amazing Race. Our employees also support nonprofit organizations with their time and philanthropy through our corporate volunteer and employee giving programs. Additional information about our community involvement, including environmental stewardship, school programs and the signature sponsorships noted, can be found by visiting Eversource's Community pages.

We are committed to emergency preparedness and business continuity and strategically coordinate preparation and response efforts for storms and other emergencies across our service territory. Our executive-led program is reviewed regularly to ensure it is implemented effectively and maintained to the highest standards. We train consistent with the Federal Emergency Management Agency (FEMA) training standards, modules, classroom instruction, drills and exercises within a formal, ongoing training and exercise program. Major events and preparedness exercises are fully debriefed, after-action reports compiled and follow-up actions tracked to completion.

All preparedness and response plans emphasize partnerships and timely communications with key stakeholders in each state. Working with communities, states and federal agencies, we have established protocols to ensure a coordinated and integrated emergency response; we also have an extensive communications and liaison team responsible for two-way communication with key stakeholders prior to and throughout an event to ensure up-to-date information is shared. Our Outage Management System tracks electric emergency response and restoration across all three states and utilizes technology that allows our customers to receive outage and restoration updates for their electric service by text, email, or phone.

All Eversource departments maintain a Business Continuity Plan that is updated each year and exercised annually. These plans ensure that we can maintain all critical and essential functions to operate the business in the event of a loss of people, systems, facilities, or vendors. Our energy efficiency portfolio takes a multi-year approach that enables us to help customers plan for the future.

We are committed to shaping new, forward-looking energy efficiency policies, legislation and regulations in each of the states in which we operate and are proud to partner with customers, regulators and stakeholders. We provide innovative, industry-leading solutions to help all customers save money and energy. We offer discounts, rebates and incentives for energy-saving products and services, professional energy assessments and tools to help customers better understand their energy use. We work with homeowners and businesses to identify and implement energy improvement opportunities and reduce operational costs. Our highly skilled technical staff and business partners are dedicated to connecting customers to those solutions.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Reliability | Delivering reliable energy<br>• System hardening<br>• Reliability and resiliency initiatives<br>• Vegetation management | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 7, 9, 15 |
| Fuel Diversity | Integrating diverse power supply into our delivery system<br>• Integration of renewable power<br>• Lower carbon solutions<br>• Fuel availability<br>• Infrastructure development | • Entire company focus<br>• Customers, service territory communities, regulators, legislators, investors | 7, 11, 13 |
| Renewables | Supporting renewable energy investments<br>• Renewable power development and procurement<br>• Transmission projects to bring cleaner energy to the region<br>• System improvements to enable integration of renewable power | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 7, 13 |
| Innovation & Technology | Transforming to the utility of the future by implementing emerging technologies<br>• Grid modernization<br>• Alternative fuel vehicles<br>• Reliability<br>• Process management systems<br>• Customer engagement and energy management | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 7, 9, 11, 13 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

We continue to prioritize projects that will increase the capability and dependability of our system. To ensure that we are responding proactively to our customers' needs for reliable energy, we establish targets at the beginning of each year and track progress on a monthly basis. We regularly review the performance of our system and perform upgrades on a continuous basis while meeting or exceeding requirements of the National Electrical Safety Code. Investments typically target upgrades that will improve the ability of the system to withstand the impacts of severe weather and wildlife interference.

Strategic investments in clean power sources, such as wind, solar and distributed generation serve as a catalyst for New England's energy future. We are also developing innovative storage projects and EV infrastructure to support our customers' power needs. Additionally, our grid modernization program supports investments in technologies to increase the capacity of our distribution system to incorporate solar generation and other clean distributed energy resources. We also work with regulators to establish new programs that will enable a greater proportion of clean energy across the grid and improve system resiliency. Long-term system resiliency plans have been established for each state in our service territory.

Our vegetation management program balances the needs of customers and communities, with the goal of providing safe, reliable electric service while monitoring growth of trees around power lines. Tree work and removal activities reduce both the number and duration of outages and are the most effective means of improving service reliability. Tree work also benefits the communities we serve by removing dead or diseased branches and trees that not only threaten power lines and rights of way, but also safety on public roads. Tree trimming is done in accordance with the standards of the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI).

We continually assess the transmission system to ensure that its operation meets regional and national reliability standards. Working in conjunction with ISO-NE, Eversource conducts periodic 10-year look-ahead transmission system studies so that system concerns are anticipated and resolved prior to being experienced in real-time operations.

The Eversource Energy Center at the University of Connecticut researches best practices for grid resilience, security, integration of renewables and grid modernization. Research areas include projects on storm outage forecasting, tree and forest management, electric grid reinforcement, resiliency, climate change and flooding, geomagnetic disturbances, integration of renewable generation and cyber security. The partnership also includes a commitment to engage under-represented minority undergraduate students in all areas of sustainable research, aligning with our increased focus on racial and social justice.

With the Electric Power Research Institute, we are developing a collaboration on storm damage recovery and situational awareness, and with the Gas Technology Institute, we are formulating research topics on remote sensing-based monitoring of natural gas and electrical infrastructure, electrical power line systems safety and automated detection algorithms and post-event evaluations of natural force threats

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Regulatory Policy | Adhering to regulatory requirements and driving energy policy<br>• Regulatory compliance<br>• Project development and approval<br>• Cost recovery | • Entire company focus<br>• Customers, service territory communities, regulators, legislators | 9, 13 |
| Ethics | Demonstrating inclusive, respectful, honest and ethical behavior<br>• Principles that govern our business<br>• Corporate compliance<br>• Diversity, equity and inclusion | • Entire company focus<br>• Investors, regulators | 5, 10, 16 |
| Finance | Meeting and exceeding performance targets while driving efficiency and managing costs<br>• Shareholder return<br>• Business growth<br>• Rate structure<br>• Financial reporting requirements<br>• Operational and capital expenditures | • Entire company focus<br>• Investors | 8, 10 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

Our ability to shape the region's energy future is based on a bedrock of strong financial performance. Doing what's right — ethically, fairly and honestly — is the cornerstone of our financial, corporate governance and compliance culture.

All trustees, officers and employees must abide by the principles of Eversource's Code of Business Conduct, which serves as the foundation of Eversource's compliance culture and comprehensive policies that collectively address day-to-day activities. All employees complete annual training and are required to accept the terms of the Code of Business Conduct and Discriminatory Harassment Prevention policy. In 2021, we consolidated our Code of Business Conduct to include Aquarion and began requiring their employees to complete its annual training and acceptance of terms. Throughout employees' careers, training is provided to ensure ongoing awareness and understanding of the Code of Business Conduct and company policies and procedures. Our Corporate Compliance Hotline is available to all employees as a simple way to report known or suspected compliance and/or ethics violations anonymously; Eversource prohibits retaliation against anyone who in good faith reports suspected noncompliance or other unethical conduct. Eversource corporate policies apply to all employees across the entire enterprise, including subsidiaries, except for Aquarion Water Company.

In 2022, we published a stand-alone Human Rights Policy that defines our commitment to the advancement and protection of human rights for all people regardless of age, race, sex, nationality, ethnicity, language, religion or other status.

The Compliance and Ethics Committee, which is chaired by the Chief Compliance Officer and comprised of business unit officers from across the company, provides oversight, guidance and assistance to management to ensure adherence to applicable laws, regulations, policies and industry standards and emphasize and reinforce the tone at the top for ethical business conduct and decision-making. The Committee provides oversight for the development and implementation of the Eversource Corporate Compliance Program and Corporate Governance Guidelines. Performance metrics are reported monthly to management, including safety, financial performance, reliability, environmental stewardship, diversity and inclusion, customer experience and clean energy strategic projects.

Our ERM program applies a well-defined methodology to identify, prioritize and mitigate principal risks to the company. The ERM program has high management visibility and is integrated with other assurance functions throughout the company, including Compliance, Auditing and Insurance. The outcome of the ERM process is discussed with the Finance Committee and the full Board, including reporting on an individual risk-by-risk basis on how these issues are being measured and managed. Risks are also disclosed in our Annual Report and 10-K.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Safety | Safety first and always<br>• Employee, contractor and public safety<br>• Electric and magnetic fields | • Entire company focus<br>• Customers, service territory communities, regulators | 3, 8 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

"Safety first and always" applies to all that we do. Our Safety Management System (SMS) continues to be implemented and includes compliance and safety policies that will enhance safety performance and the company's management philosophy through Human and Organization Performance (HOP).

Safety continues to focus on comprehensive policies, procedures and work instructions that outline safety requirements for employees and contractors. All employees are required to be familiar with our safety expectations, which are defined in the Eversource Safety Manual, and receive relevant training for their job. Safety Briefs are released, at a minimum, weekly offering timely information on how to stay safe at work and at home. All contractors are required to adhere to the Eversource Contractor Safety Policy. For complex projects, contractors submit project Health and Safety Plans (HASP) documentation to Eversource for evaluation. Additionally, all contractor incidents and injury events must be immediately reported, and incident analysis must be submitted for Eversource review. Contractor safety performance is reviewed annually and those with high cases of incidents, injury or Serious Injury or Fatality (SIF) actuals or potential events are required to complete a corrective action plan to remain an "approved" contractor.

Eversource safety manuals are available for both employees and contractors. We monitor our contractor workforce using ISNetworld to evaluate the quality of a contractor's safety programs and review their safety data annually.

We also continue to play a leadership role within industry groups. As a member of the Occupational Safety and Health Executive Advisory Committee for the Edison Electric Institute (EEI), we participate in the maturation of an industry-wide SIF precursor standard and engage with Occupational Safety and Health Administration (OSHA) on industry concerns. Involvement with the Construction Safety Research Alliance (CRSA), a joint utility, construction and general industry task force, focuses on the development of predictive analytic tools to identify risk factors that could lead to serious injuries. We also participate in the North American Transmission Forum (NATF) and American Gas Association (AGA) to engage in best practice sharing meetings and peer reviews.

Our historic commitment to public safety utilizes a variety of resources for conducting electrical and gas safety presentations for first responders, emergency management personnel and other groups throughout our service territory. An example of this commitment is our semi-annual electrical hazard awareness training given to fire and police academies to help ensure safe and effective response by first responders to system emergencies.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Workforce Development & Employee Engagement | Maintaining an engaged and skilled workforce<br>• Attract and retain high-quality employees<br>• Employee training and development programs<br>• Succession planning<br>• Labor relations | • Entire company focus<br>• Service territory communities<br>• Select external stakeholder groups | 3, 4, 5, 8 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

An engaged workforce is critical to our mission of delivering reliable energy and a superior customer experience. We build employee engagement by communicating direction and priorities, managing performance, developing talent, fostering teamwork and creating a diverse, equitable and inclusive workplace.

Bi-annual Employee Engagement and Culture surveys are conducted to identify areas of high performance and areas of opportunity, providing insight into how we can continue to build engagement and a performance culture. Key employee engagement actions include efforts to improve the employee and customer experience, pursuit of employee feedback, promotion of collaborative work and providing access to information and technology resources. We recognize employees who demonstrate a commitment to go "above and beyond" their job requirements through our Customer Excellence Awards and "Plus One" recognition programs.

We provide opportunities for engagement with executive leaders through town hall and skip-level meetings and through training and quarterly forums to develop new and current supervisors and managers. All employees are invited to participate in the "Our Business, Our Future" training program, which provides business-specific knowledge and information to our entire organization.

Strategic workforce plans are developed each year to identify long-range needs to ensure that we acquire, develop and retain diverse, capable talent. This includes leveraging educational partnerships in critical craft and technical areas and developing proactive strategies to attract experienced professionals in highly technical roles in engineering, electric and gas operations and energy efficiency. These plans identify critical roles and develop succession plans to ensure Eversource has a supply of capable talent for the future.

Employees receive a variety of field and classroom training opportunities throughout their careers to support their ongoing success on the job, including:

- A talent management process to identify high potential and emerging talent and ensure their development
- Cohort programs: Transmission & Substation Engineering, Distribution Engineering, Transmission, Safety and Gas Operations
- Trainee program: Construction Representatives, Distribution Design Engineering
- A tuition assistance program
- Paid internships and co-ops, partnering with local educational institutions to provide on-the-job learning opportunities

We are also committed to providing our employees with a competitive total rewards package. In addition to wages and salaries, we offer a wide variety of benefits that help keep employees and their families healthy and financially secure. One example is our recruitment and military reserve policies which offer a pay differential and full benefits for the full duration of a service member's deployment as well as any training required when that employee is returning to work. We actively seek candidates with military experience and offer training and advancement programs that provide opportunities at all levels. Our benefit plans, as highlighted on our Career page, focus on health and wellness, life and the future.

Eversource's commitment to diversity, equity and inclusion (DE&I) is critical to building a diverse, empowered and engaged team that delivers great service safely to our customers. Executive leadership promotes and supports DE&I by building diverse, inclusive work teams with high engagement, and supports the work of our D&I council and employee Business Resource Groups (BRG). The Board receives regular updates. We are a signatory of the CEO Action for Diversity and Inclusion pledge and the Paradigm for Parity. We also continue to collaborate with the EEI, supporting the EEI D&I Commitment with initiatives and metrics. In 2020, Eversource updated its DE&I strategy to include a Racial Equity and Social Justice Plan, with three areas of focus in 2021: building a more inclusive workplace, increasing leadership commitment and further enhancing support for our diverse communities and suppliers. Our Racial Equity Task Force is responsible for identifying issues and developing solutions that will increase equity through talent management, inclusion and community support.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Cybersecurity & Data Protection | Ensuring the security of customer and employee data, computer systems, grid infrastructure and physical assets.<br>Includes protection against:<br>• Disclosure of confidential information<br>• Cyber breaches<br>• Grid disturbances<br>• Acts of war or terrorism | • Entire company focus<br>• Customers, service territory communities, investors, regulators, legislators | 9, 16 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

Eversource prioritizes the importance of protecting our customers' personal information. A comprehensive program, overseen by the Board, helps ensure delivery of services and protection against the loss, misuse and alteration of customer data.

Safeguards used to protect customer data include:

- Comprehensive information security policies and procedures
- Risk assessments to identify and address new and changing risks to protect systems and sensitive data
- Implementation of security solutions and standards based on industry best practices to prevent unauthorized access
- Penetration tests including Red Team assessments
- Rigorous auditing of all safeguards on a regular basis
- Employee training in the proper handling of personal information
- Incident response plan exercises
- Threat information sharing with the U.S. government and industry organizations

Further information on data we collect, how we safeguard customer information and how customers can protect their information can be found in our Privacy Policy published on Eversource.com.

| Material Topics | Topic Description and Scope (Including, but not limited to) | Topic Boundary (GRI 103-1) | Relevant SDGs |
|---|---|---|---|
| Supply Chain | Managing our supply chain<br>• Supplier diversity<br>• Supplier management systems<br>• Material management processes | • Entire company focus<br>• Service territory communities<br>• Select external stakeholder groups | 5, 8, 12 |

**Management Approach (103-2) and Evaluation of Management Approach (103-3)**

We recognize the importance of ethical behavior in both business relationships and the workplace and actively promote sustainability in our supply chain. We provide all suppliers with equal access to procurement opportunities and promote supplier participation reflective of the diverse business community. To clearly set out our expectations for suppliers, Eversource requires all vendors to adhere to our Supplier Code of Business Conduct. Our internal audit program periodically includes vendor reviews that assess vendor compliance with applicable federal and state environmental regulations.

Our Supplier Relationship Management program ensures that we work collaboratively with our strategic suppliers to drive value, reduce risk and strengthen our competitive position through regular performance management meetings with our top vendors. As we continue to develop the program, we will partner with additional suppliers and further incorporate vendor risk into our supplier scorecards.

Our procurement process includes an assessment of each vendor's ESG efforts. Scores for all awarded vendors are tracked on an ongoing basis to monitor progress and ensure supplier compliance with laws and regulations. Suppliers engaged in environmental work are monitored by experienced environmental specialists to ensure projects meet contractual and regulatory obligations. Additionally, we survey our top suppliers to monitor their sustainability performance and identify opportunities for improvement with which we may be of assistance with or on which we can collaborate.

We actively support industry-wide expansion of supply chain sustainability through participation in the Electric Utility Industry Sustainable Supply Chain Alliance, a collaboration of utilities working together to advance best practices in utility supply chain activities and supplier networks.

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 102 | General Disclosures | 102-1 | Name of the organization | Eversource Energy |
| GRI 102 | General Disclosures | 102-2 | Activities, brands, products and services | Pg. 3 About Eversource<br>Eversource serves residential, business and industrial customers in delivering electric, natural gas and water through our regulated utilities across Connecticut, Massachusetts and New Hampshire. |
| GRI 102 | General Disclosures | 102-3 | Location of headquarters | Eversource is headquartered in Harford, Connecticut and Boston, Massachusetts. |
| GRI 102 | General Disclosures | 102-4 | Location of operations | All operations are in the United States. In addition to the Eversource headquarters, the Company conducts business from significant offices in Berlin, Connecticut; Westwood, Massachusetts; and Manchester, New Hampshire as well as numerous operations across its service territory in New Hampshire, Massachusetts and Connecticut. |
| GRI 102 | General Disclosures | 102-5 | Ownership and legal form | Eversource is an investor-owned corporation operating on the New York Stock Exchange under the trading symbol ES. |
| GRI 102 | General Disclosures | 102-6 | Markets served | Pg. 77 By the Numbers<br>Annual Report (pg. 2)<br>Communities We Serve |
| GRI 102 | General Disclosures | 102-7 | Scale of the organization | Pg. 77 By the Numbers<br>Also see our Annual Report |
| GRI 102 | General Disclosures | 102-8 | Information on employees and other workers | Pg. 77 By the Numbers |
| GRI 102 | General Disclosures | 102-9 | Supply chain | Pg. 49 Supply Chain<br>Doing Business With Us |
| GRI 102 | General Disclosures | 102-10 | Significant changes to the organization and its supply chain | On December 1, 2021, Aquarion Company completed the acquisition of New England Service Company. |
| GRI 102 | General Disclosures | 102-11 | Precautionary Principle or approach | Pg. 48, 52 Governance<br>Eversource is guided by the precautionary principle in all its operations to avoid negative impacts on the environment to the greatest extent feasible. |
| GRI 102 | General Disclosures | 102-12 | External initiatives | Eversource participates in a number of voluntary initiatives including:<br>• CEO Action for Diversity & Inclusion ™<br>• EEI and AGA ESG Reporting Initiative<br>• EEI Commitment to 5% of annual fleet spend on plug-in EV technologies<br>• Fitwel Certification<br>• EPA Natural Gas STAR Methane Challenge Program<br>• National Electric Highway Coalition<br>•Paradigm for Parity |
| GRI 102 | General Disclosures | 102-13 | Membership in associations | Trade Association Participation<br>Eversource proudly participates in a wide variety of associations including:<br>• Alliance for Water Efficiency<br>• American Water Works Association<br>• Associated Industries of Massachusetts<br>• Avian Power Line Interaction Committee<br>• Business and Industry Association of New Hampshire<br>• Call Before You Dig Inc. (CBYD)<br>• Connecticut Business and Industry Association<br>• Connecticut Council of Philanthropy<br>• Connecticut Water Works Association<br>• Dig Safe System Inc.<br>• Edison Electric Institute (EEI)<br>• Electric Power Research Institute (EPRI)<br>• Electric Utility Industry Sustainable Supply Chain Alliance<br>• Environmental Business Council of New England<br>• Equal Employment Advisory Council<br>• Greater New England Minority Supplier Development Council<br>• National Association of Water Companies<br>• New England Clean Energy Council<br>• New England Council<br>• New Hampshire Economic Development Association<br>• New Hampshire Manufacturing Extension Partnership<br>• New Hampshire Small Business Development Center<br>• Northeast Energy Efficiency Partnership<br>• Northeast Gas Association<br>• Stay-Work-Play New Hampshire<br>• Utility Solid Waste Activities Group<br>• Utility Water Act Group<br>• Water Research Institute |

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 102 | General Disclosures | 102-14 | Statement from senior decision-maker | Pg. 6 Message From Our CEO<br>Annual Report |
| GRI 102 | General Disclosures | 102-15 | Key impacts, risks and opportunities | Pg. 51 Risk Management and throughout this report<br>Annual Report (pgs. 12-16) |
| GRI 102 | General Disclosures | 102-16 | Values, principles, standards and norms of behavior | Pg. 50-51 Ethics<br>In addition to our Code of Business Conduct, our corporate policies outline the workplace behaviors that all employees are expected to follow. Our Code of Business Conduct and corporate policies are reviewed annually and updated as necessary. Throughout employees' careers, training is provided to ensure ongoing awareness and understanding of our company's policies and procedures. Employees are encouraged to speak with their managers if they have any questions. Corporate Policies cover the following topics:<br>• Anti-Corruption and Anti-Bribery<br>• Antitrust and Competition Compliance<br>• Citizenship & Charitable Giving<br>• Compensation<br>• Conflict of Interest<br>• Critical Infrastructure Protection<br>• Delegation of Authority<br>• Environmental<br>• Fitness for Work<br>• Fleet Use<br>• Fraud Prevention and Detection<br>• Hiring<br>• Human Rights<br>• Insider Trading<br>• Intellectual Property<br>• Internal Controls and the Safeguard of Company Assets<br>• Major Emergency Event<br>• Procurement<br>• Reimbursable Expenses<br>• Record and Information Management<br>• Safety<br>• Supplier Code of Conduct<br>• Discriminatory Harassment Prevention<br>• Termination of Employment<br>• Workplace Behavior |
| GRI 102 | General Disclosures | 102-17 | Mechanisms for advice and concerns about ethics | Pg. 50-51 Ethics<br>Code of Business Conduct, Human Rights Policy |
| GRI 102 | General Disclosures | 102-18 | Governance structure | Pg. 48-52 Governance<br>Corporate Governance Guidelines, Proxy Statement (pgs. 13-20, 27-28) |
| GRI 102 | General Disclosures | 102-19 | Delegating authority | Corporate Governance Guidelines, Proxy Statement (pgs. 13-20) |
| GRI 102 | General Disclosures | 102-20 | Executive-level responsibility for economic, environmental and social topics | The Governance, Environmental and Social Responsibility Committee of the Board of Trustees of Eversource Energy has primary oversight responsibility for the Company's environmental, human capital management and social responsibility programs and performance. Our Vice President of Sustainability and Environmental Affairs is responsible for environmental topics and ESG. She reports to the Executive Vice President Corporate Relations and Sustainability. |
| GRI 102 | General Disclosures | 102-21 | Consulting stakeholders on economic, environmental and social topics | Pg. 57 Material Topics<br>Proxy Statement (pgs. 28-29, 31) |
| GRI 102 | General Disclosures | 102-22 | Composition of the highest governance body and its committees | Pg. 48 Governance<br>Corporate Governance Guidelines, Proxy Statement (pgs. 13-20) |
| GRI 102 | General Disclosures | 102-23 | Chair of the highest governance body | As of the end of 2021, Eversource's Board of Trustees consists of 12 trustees, only two of whom, James J. Judge, our Executive Chairman of the Board, and Joseph R. Nolan, Jr., President and Chief Executive officer, are members of management.<br>Proxy Statement (pgs. 13-20) |
| GRI 102 | General Disclosures | 102-24 | Nominating and selecting the highest governance body | Corporate Governance Guidelines, Proxy Statement (pgs. 13-20) |
| GRI 102 | General Disclosures | 102-25 | Conflicts of interest | Corporate Governance Guidelines, Code of Business Conduct |
| GRI 102 | General Disclosures | 102-26 | Role of highest governance body in setting purpose, values and strategy | Proxy Statement (pgs. 21-27) |
| GRI 102 | General Disclosures | 102-27 | Collective knowledge of highest governance body | Proxy Statement (pgs. 17-20) |

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 102 | General Disclosures | 102-28 | Evaluating the highest governance body's performance | Proxy Statement (pgs. 34-60) |
| GRI 102 | General Disclosures | 102-29 | Identifying and managing economic, environmental and social impacts | Proxy Statement (pgs. 20-27) |
| GRI 102 | General Disclosures | 102-30 | Effectiveness of risk management processes | Proxy Statement (pgs. 20-27) |
| GRI 102 | General Disclosures | 102-31 | Review of economic, environmental and social topics | Proxy Statement (pg. 20-27) |
| GRI 102 | General Disclosures | 102-35 | Remuneration policies | Proxy Statement (pgs. 34-60) |
| GRI 102 | General Disclosures | 102-36 | Process for determining remuneration | Proxy Statement (pgs. 41-60) |
| GRI 102 | General Disclosures | 102-38 | Annual total compensation ratio | Proxy Statement (pg. 69) |
| GRI 102 | General Disclosures | 102-40 | List of stakeholder groups | Pg. 49 Stakeholder Engagement<br>Pg. 57 Material Topics<br>Proxy Statement (pgs. 28-29). Eversource engages with a variety of stakeholder groups, including customers, community groups, shareholders, potential investors, regulators, environmental stakeholders, employees, retirees, labor unions, contractors and others in our supply chain, as well as various professionals in academia, industry and government. |
| GRI 102 | General Disclosures | 102-41 | Collective bargaining agreements | As of the end of 2021, approximately 53% of our employees are members of the International Brotherhood of Electrical Workers, the Utility Workers Union of America or The United Steelworkers and are covered by eight collective bargaining agreements. At Aquarion, 10% of employees are represented by trade unions. |
| GRI 102 | General Disclosures | 102-42 | Identifying and selecting stakeholders | Pg. 57 Material Topics<br>Proxy Statement (pgs. 28-29). Most Eversource stakeholder groups are the result of longstanding relationships. New relationships are built on mutual interests and common goals. |
| GRI 102 | General Disclosures | 102-43 | Approach to stakeholder engagement | Eversource actively seeks opportunities to engage with our internal and external stakeholders. We offer extensive resources on our website, as well as contact options for our sustainability report, investor relations, customer feedback, operating companies and key departments. Monthly customer communications are offered to customers in bill inserts and on our website and each operating company has a community relations team that manages local stakeholder relationships. Approaches to engage with different stakeholder groups are also addressed in our sustainability report and on our website.<br>Pg. 34-35 Promoting Equity<br>Pg. 42-43 Our Customers<br>Pg. 44 Our Communities<br>Proxy Statement (pgs. 22-29)<br>Customer Communications, Contact Us, Investor Relations Presentations, EEI and AGA ESG Initiative |
| GRI 102 | General Disclosures | 102-44 | Key topics and concerns raised | Pg. 6, 34 Messages From Leadership<br>Proxy Statement (pgs. 28-29), Annual Report (pgs. 2-4), Leadership in Transmission, Eversource Energy Rates |
| GRI 102 | General Disclosures | 102-45 | Entities included in the consolidated financial statements | Annual Report (pg. 1) |
| GRI 102 | General Disclosures | 102-46 | Defining report content and topic Boundaries | Pg. 57 Material Topics, Pg. 2 About this Report |
| GRI 102 | General Disclosures | 102-47 | List of material topics | Pg. 57 Material Topics |
| GRI 102 | General Disclosures | 102-48 | Restatements of information | There are no material restatements of information since Eversource's 2020 Sustainability Report. Historical GHG data includes New England Service Company, which we acquired in 2021. |
| GRI 102 | General Disclosures | 102-49 | Changes in reporting | None |
| GRI 102 | General Disclosures | 102-50 | Reporting period | Calendar year 2021 |
| GRI 102 | General Disclosures | 102-51 | Date of most recent report | Our last report was published in July 2021, covering performance during the 2020 calendar year |
| GRI 102 | General Disclosures | 102-52 | Reporting cycle | Annual |
| GRI 102 | General Disclosures | 102-53 | Contact point for questions regarding the report | Contact Us |



## GLOBAL REPORTING INITIATIVE INDEX

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 102 | General Disclosures | 102-54 | Claims of reporting in accordance with the GRI Standards | This report has been prepared in accordance with the GRI Standards' Core Option. |
| GRI 102 | General Disclosures | 102-55 | GRI content index | This GRI Index |
| GRI 102 | General Disclosures | 102-56 | External assurance | Pg. 56 GHG External Verification |
| EU1 | General Disclosures | | Installed capacity, broken down by primary energy source and by regulatory regime | 70 MW solar capacity<br>EEI and AGA ESG Initiative Quantitative Report |
| EU2 | General Disclosures | | Net energy output broken down by primary energy source and by regulatory regime | In 2021, the energy output of our 70 MW of solar capacity in Massachusetts was 77,500 MWh generated, avoiding over 18,700 MT CO2e.<br>Energy Labels are provided for our customers in Massachusetts and New Hampshire and are available in Customer Communications, EEI and AGA ESG Initiative Quantitative Report.<br>Eversource is committed to help the states we serve in meeting their Renewable Portfolio Standards and Clean Energy Standards, which require a certain percentage of the states' electricity supply to come from renewable sources as shown in By the Numbers Pg. 79. |
| EU3 | General Disclosures | | Number of residential, industrial and institutional and commercial accounts | Pg. 81 By the Numbers |
| EU4 | General Disclosures | | Length of above and underground transmission and distribution lines by regulatory regime | Annual Report (pg. 21) |
| EU5 | General Disclosures | | Allocation of $CO_2e$ emissions allowance or equivalent, broken down by carbon trading framework | Pg. 79 By the Numbers<br>Annual Report (pg. 10) |
| GRI 103 | Management Approaches | 103-1<br>103-2<br>103-3 | Explanation of the material topics and their boundaries, the management approach and its components and the evaluation of the management approach | Pg. 57 Material Topics |
| GRI 201 | Economic Performance | 201-1 | Direct economic value generated and distributed | Pg. 9 Offshore Wind<br>Annual Report beginning on page 38<br>Community Relations and Economic Development |
| GRI 201 | Economic Performance | 201-2 | Financial implications and other risks and opportunities due to climate change | Pg. 72-73 TCFD disclosure<br>CDP Section 2<br>Annual Report (pgs. 10-11, 14 and 15) |
| GRI 201 | Economic Performance | 201-3 | Defined benefit plan obligations and other retirement plans | Annual Report (pgs. 68-74) |
| EU10 | Availability and Reliability | | Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime | EEI AGA ESG Template |
| EU11 | System Efficiency | | Average generation efficiency of thermal plants by energy source and by regulatory regime | EEI AGA ESG Template |
| EU12 | System Efficiency | | Transmission and distribution losses as a percentage of total energy | 2021 transmission and distribution losses equal approximately 4% of total energy |
| GRI 203 | Indirect Economic Impacts | 203-1 | Infrastructure investments and services supported | Pg. 8-16 Innovating For The Future<br>Leadership in Transmission, Major Projects & Infrastructure |



## GLOBAL REPORTING INITIATIVE INDEX

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 203 | Indirect Economic Impacts | 203-2 | Significant indirect economic impacts | Pg. 14-15 Electric Vehicle Infrastructure, Energy Efficiency<br>Pg. 35 Promoting Equity and Justice<br>Pg. 36-39 Our Employees<br>Pg. 42-55 Our Customers, Our Communities<br>Pg. 49 Supplier Diversity |
| GRI 204 | Procurement Practices | 204-1 | Proportion of spending on local suppliers | Eversource does not report spending on local suppliers.<br>About Procurement Services |
| GRI 205 | Anti-corruption | 205-1 | Operations assessed for risks related to corruption | All Eversource operations are taken into consideration throughout the Enterprise Risk Management process, which includes risks related to corruption. |
| GRI 205 | Anti-corruption | 205-2 | Communication and training about anti-corruption policies and procedures | All employees complete annual training and are required to sign off on the Code of Business Conduct and Discriminatory Harassment Prevention.<br>Pg. 50-51 Ethics<br>Code of Business Conduct, Code of Ethics |
| GRI 206 | Anti-competitive Behavior | 206-1 | Legal actions for anti-competitive behavior, anti-trust and monopoly practices | Eversource is subject to and in full compliance with all laws and regulations that ensure the non-utility subsidiaries receive no unfair competitive advantage as a result of being affiliated with our electric and gas utilities. See Affiliates. Anti-competitive behavior is prohibited as stated in our Code of Business Conduct and our Antitrust and Competition Compliance policy. |
| GRI 207 | Tax | 207-1 | Approach to tax | In 2021, Eversource Energy and affiliates paid $867 million in state and local taxes mainly to the three states of Connecticut, Massachusetts and New Hampshire. The taxes that Eversource pays include state income and franchise taxes, property taxes and various other state and local taxes. Management views Eversource's responsibility of our tax obligations as a very important part of the company's operations and therefore is a diligent taxpayer. We view our tax obligations as having a positive impact on the various state and local communities in which Eversource does business. |
| GRI 302 | Energy | 302-1 | Energy consumption within the organization | Pg. 26 Facilities<br>Pg. 80 By the Numbers<br>CDP Section 8.2<br>The energy we purchased for our own use in 2021 was at a minimum of 30.5% renewable for Connecticut, 49.26% renewable for Massachusetts and 21.6% for New Hampshire. In 2022, the energy we purchase for our own use will be at a minimum of 33% renewable for Connecticut, 51.3% renewable for Massachusetts and 22.5% for New Hampshire.<br>In 2021, we purchased 52,415,197 kWh of renewable power for use in our operations. |
| GRI 302 | Energy | 302-2 | Energy consumption outside of the organization | Annual Report (pg. 38)<br>Pg. 83 By the Numbers (Energy Efficiency) |
| GRI 302 | Energy | 302-4 | Reduction of energy consumption | Pg. 25-26 Carbon Neutrality Goal<br>Pg. 15-16 Energy Efficiency, Distributed Generation<br>Pgs. 80, 83 By the Numbers |
| GRI 303 | Water and Effluents | 303-1 | Interactions with water as a shared resource | Pg. 27-28 Protecting Water<br>Pg. 57 Material Topics<br>Proxy Statement (pg. 24) |
| GRI 303 | Water and Effluents | 303-2 | Management of water discharge-related impacts | Pg. 57 Material Topics |
| GRI 303 | Water and Effluents | 303-3 | Water withdrawal | Pg. 80 By the Numbers |
| GRI 303 | Water and Effluents | 303-5 | Water consumption | Pg. 80 By the Numbers |
| GRI 304 | Biodiversity | 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | Pg. 29-31 Environmental Stewardship<br>Land Management |
| GRI 304 | Biodiversity | 304-2 | Significant impacts of activities, products and services on biodiversity | Pg. 29-31 Environmental Stewardship<br>Eversource Rights-of-Way Guidelines, Vegetation Management |



## GLOBAL REPORTING INITIATIVE INDEX

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 304 | Biodiversity | 304-3 | Habitats protected or restored | Pg. 29-31 Environmental Stewardship<br>Eversource Land Trust<br>Land Management |
| GRI 305 | Emissions | 305-1 | Direct (Scope 1) GHG emissions | Pg. 25 Carbon Neutrality Goal<br>Pg. 79 By the Numbers<br>CDP Section 6.1 |
| GRI 305 | Emissions | 305-2 | Energy indirect (Scope 2) GHG emissions | Pg. 25 Carbon Neutrality Goal<br>Pg. 79 By the Numbers<br>CDP Section 6.2 |
| GRI 305 | Emissions | 305-3 | Other indirect (Scope 3) GHG emissions | CDP Section 6.5 |
| GRI 305 | Emissions | 305-4 | GHG emissions intensity | CDP Section 6.10 |
| GRI 305 | Emissions | 305-5 | Reduction of GHG emissions | Pg. 25-26 Carbon Neutrality Goal<br>Our goal to be carbon neutral in our operations by 2030, covering our Scope 1 and Scope 2 emissions. |
| GRI 305 | Emissions | 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant air emissions | Pg. 79 By the Numbers |
| GRI 306 | Waste | 306-1 | Waste generation and significant waste-related impacts | Pg. 27 Waste Management<br>Pg. 58 Material Topics |
| GRI 306 | Waste | 306-2 | Management of significant waste-related impacts | Pg. 27 Waste Management<br>Pg. 58 Material Topics |
| GRI 306 | Waste | 306-3 | Waste generated | Pg. 80 By the Numbers |
| GRI 306 | Waste | 306-4 | Waste diverted from disposal | Pg. 80 By the Numbers |
| GRI 306 | Waste | 306-5 | Waste directed to disposal | Pg. 80 By the Numbers |
| GRI 307 | Env. Compliance | 307-1 | Non-compliance with env. laws and regulations | Pg. 80 By the Numbers |
| GRI 308 | Supplier Environmental Assessment | 308-1 | New suppliers that were screened using environmental criteria | Pg. 49, 84 Supply Chain<br>All Requests for Proposals require potential suppliers to provide information regarding the environmental impact of their products or services. We expect all of our suppliers to be familiar with and to adhere to Eversource's Environmental Policy, to comply with all applicable environmental laws and regulations and to conduct operations in an environmentally responsible manner that respects both the natural and human environment. |
| GRI 401 | Employment | 401-1 | New employee hires and employee turnover | Pg. 78 By the Numbers<br>Diversity, Equity & Inclusion Report |
| GRI 401 | Employment | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | All full-time Eversource employees at all locations of operations are entitled to comprehensive benefits as outlined on our Careers website. Part-time employees who work over 20 hours per week are also eligible for these benefits with some proration based on work schedule. |
| EU15 | Employment | | Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region | Eversource does not publicly report these statistics.<br>Pg. 38 Workforce Development |
| EU17 | Employment | | Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities | Eversource does not publicly disclose these statistics. |



## GLOBAL REPORTING INITIATIVE INDEX

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 403 | Occupational Health and Safety | 403-1 | Occupational health and safety management system | Pg. 40 Safety<br>Pg. 61 Material Topics |
| GRI 403 | Occupational Health and Safety | 403-2 | Hazard identification, risk assessment and incident investigation | Pg. 40 Safety<br>Pg. 61 Material Topics<br>Safety section of our website, Builders & Contractors |
| GRI 403 | Occupational Health and Safety | 403-3 | Occupational health services | Pg. 40 Safety<br>Pg. 61 Material Topics |
| GRI 403 | Occupational Health and Safety | 403-4 | Worker participation, consultation and communication on occupational health and safety | The Safety Team meets with workers on a monthly basis through scheduled meetings with local unions, in Safety Committee meetings and by using HOP practices of listening sessions and learning teams as appropriate.<br>Pg. 61 Material Topics |
| GRI 403 | Occupational Health and Safety | 403-5 | Worker training on occupational health and safety | Pg. 61 Material Topics |
| GRI 403 | Occupational Health and Safety | 403-6 | Promotion of worker health | Pg. 40 Safety<br>Pg. 41 Wellness and Benefits<br>Pg. 61-62 Material Topics |
| GRI 403 | Occupational Health and Safety | 403-9 | Work related injuries | Pg. 78 By the Numbers |
| EU18 | Occupational Health and Safety | | Percentage of contractor and subcontractor employees that have undergone relevant health and safety training | As specified in our Supplier Code of Business Conduct, all suppliers must adhere to Eversource's Safety Policy and procedures, safety laws and maintain industry-appropriate safety and occupational health standards and practices in the performance of their work. Specific safety information for Builders & Contractors doing business with Eversource is available on our website. To ensure the safety of businesses and contractors in our community that may work on or around our electric and gas distribution systems, we conduct comprehensive outreach and provide safety communications directing contractors to Eversource resources and information including direct mail, social media and web-based videos. There is an external Eversource webpage for sharing Safety information with Contractors: Electric Contractor Safety Requirements |
| GRI 404 | Training and Education | 404-1 | Average hours of training per year per employee | Each year, we offer our 4400+ gas and electric operations employees a variety of training opportunities that support employee skill development and reinforces Eversource safety requirements. In 2021 employees were offered a combination of group and individual training sessions of varying length: A session may last only a half day, or it may run for six weeks. In total, our group delivered over 2500 training days of multiple sessions that ran simultaneously. In 2021, also we designed and delivered customized, web-based culture-shifting training for all leaders in gas & electric operations. We prepared and included numerous unique Eversource leader videos to reinforce program coaching points. We also provided leadership training, coaching and opportunities to participate in corporate initiatives, projects and events to our 300 high potential talent population. Additionally, we held 73 Learning & Development sessions were held with 2,477 attendees, plus 582 IT training sessions held with 2,995 attendees. |
| GRI 404 | Training and Education | 404-2 | Programs for upgrading employee skills and transition assistance programs | Pg. 38 Workforce Development<br>Careers<br>Proxy Statement (pg. 26) |
| GRI 404 | Training and Education | 404-3 | Percentage of employees receiving regular performance and career development reviews | All non-represented employees receive annual and mid-year performance reviews. Represented employees receive reviews per the terms of union contracts |
| GRI 405 | Diversity and Equal Opportunity | 405-1 | Diversity of governance bodies and employees | Pg. 4 Our Commitment<br>Pg. 36 Diversity & Inclusion<br>Pg. 78 By the Numbers<br>Diversity, Equity & Inclusion Report |
| GRI 412 | Human Rights Assessment | 412-1 | Operations that have been subject to human rights reviews or impact assessments | Human Rights Policy<br>Eversource respects human rights and, as a company operating in the United States, adheres to all laws and regulations that protect our employees and people in the communities that we serve. All employees are required to adhere to our Code of Business Conduct that addresses human rights. Additionally, our Supplier Code of Business Conduct sets human rights expectations for our suppliers. |

| GRI Standard | | Disclosure | Disclosure Title | Page / Response |
|---|---|---|---|---|
| GRI 412 | Human Rights Assessment | 412-2 | Employee training on human rights policies or procedures | Human Rights Policy<br>All employees complete annual training and are required to sign off on our Code of Business Conduct, which includes our human rights policies. |
| GRI 413 | Local Communities | 413-1 | Operations with local community engagement, impact assessments and development programs | Pg. 9 Offshore Wind<br>Pg. 10 Solar<br>Pg. 11 Decarbonizing the Heating Sector<br>Pg. 12 Geothermal<br>Pg. 13 Energy Storage<br>Pg. 14 Electric Vehicle Infrastructure<br>Pg. 15 Energy Efficiency<br>Pg. 21 Vegetation Management<br>Pg. 27-28 Protecting Water<br>Pg. 30-31 Wildlife and Habitat Protection<br>Pg. 34-35 Promoting Equity and Justice<br>Pg. 38 Workforce Development<br>Pg. 43 Customer Assistance Programs<br>Pg. 44-46 Our Communities<br>Community Relations & Economic Benefit, Community Support |
| GRI 414 | Supplier Social Assessment | 414-1 | New suppliers that were screened using social criteria | Pg. 49 Supply Chain<br>Pg. 84 By the Numbers |
| GRI 415 | Public Policy | 415-1 | Political contributions | Political Activity Policy |
| GRI 416 | Customer Health and Safety | 416-1 | Assessment of the health and safety impacts of product and service categories | Pg. 22 Emergency Preparedness<br>Eversource Safety, Transmission Safety<br>In accordance with recommendations of various regulatory bodies and public health organizations, we reduce EMF associated with new transmission lines by the use of designs that can be implemented without additional cost or at a modest cost. We do not believe that other capital expenditures are appropriate to minimize unsubstantiated risks. |
| EU25 | Customer Health and Safety | | Number of injuries and fatalities to the public involving company assets, including legal judgements, settlements and pending legal cases of diseases | Eversource does not publicly disclose these statistics |
| GRI 418 | Customer Privacy | 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | Eversource does not publicly report this information<br>Privacy Statement |
| EU28 | Access | 103.2 | Power outage frequency | Pg. 81 By the Numbers |
| EU29 | Access | | Average power outage duration | Pg. 81 By the Numbers |

# Taskforce for Climate-Related Financial Disclosures (TCFD)

The Task Force on Climate-related Financial Disclosures (TCFD) establishes recommendations for disclosing clear, comparable and consistent information about the risks and opportunities presented by climate change. Eversource is committed to providing our stakeholders with this important information.

Eversource continuously assesses the physical and transitional impacts related to climate change and develops mitigation strategies. Our assessment includes evaluating the impacts of more severe weather events, regulatory and financial risks, changing customer behavior, and opportunities to reduce emissions in our operations and for the region through clean energy investments, energy efficiency programs and the pursuit of emerging technologies.

Physical risks from climate change may include an increase in sea level and changes in weather conditions, such as changes in precipitation, more frequent and severe storms, severe heat and drought. To the extent weather conditions are affected by climate change, customers' energy and water usage could increase or decrease depending on the duration and magnitude of the changes. For residential customers, heating and cooling is the largest energy use. For water customers, conservation measures imposed by the communities we serve could impact water usage.

We offer programs that advance energy efficiency in buildings and contribute to related state and regional policy priorities. This work, coupled with our storm hardening and emergency response activities, allows us to prepare for and respond to the impacts of climate change so that we are able to serve our customers today and into the future. Our water utility has expanded water conservation programs and limits irrigation in areas where reservoirs are at risk of being stressed by drought.

We are also pursuing climate-related opportunities that enable continued business success while serving the needs of our customers. Our clean energy investments help reduce regional emissions while improving shareholder value. Our energy efficiency solutions and EV infrastructure investments allow our customers to make choices that minimize climate-related impacts. Also, resource efficiencies, such as making our buildings more efficient and transitioning to EV technologies in our fleet, help lower our operational costs and emissions. Finally, our actions to improve system reliability and resiliency allow our business to operate under changing conditions and ensure customer satisfaction.

***Increasing Resiliency to Climate Change Impacts***

To maintain resiliency across our system in the face of climate change, we're pursuing the following actions:

- Working with our regulators to gain approval for new programs that will help improve our system resiliency in response to climate change, including vegetation management, pole and wire strengthening, flood proofing and other system hardening measures
- Implementation of a long-term substation flood mitigation strategy that uses predictive modelling methods to better assess flooding risk to substation infrastructure to aid real-time operational decisions and guide future electrical system planning and substation asset strategy and design
- Implementing a grid modernization plan that will enhance our electric transmission and distribution infrastructure to improve resiliency and reliability and facilitate integration of distributed energy resources
- Focusing on improving the efficiency of our electric and gas distribution systems, preparing for the opportunities that clean energy advancements create and providing customers with ways to optimize their efficiency
- Investigating technologies such as energy storage and automation programs that improve reliability
- Implementing programs to address risks that may impact water availability and water quality

***Quantifying, Disclosing and Reducing Our Company's Carbon Footprint***

On an annual basis, we quantify our carbon footprint through a comprehensive greenhouse gas (GHG) emission inventory for our operations that is independently verified.

We have created targeted strategies to accomplish our goal of carbon neutrality by 2030, which will reduce GHG emissions across the company, including addressing:

- Line loss, or the energy lost when power is transmitted and distributed across our electric system (one of the industry's greatest challenges), by supporting state and regional efforts that are enabling a cleaner mix of energy in the grid and improving efficiencies in our transmission infrastructure
- Our natural gas distribution system, by replacing aging steel and cast-iron pipes to reduce methane leaks and exploring innovative options, such as piloting geothermal technology
- Our facilities, by increasing our use of renewable energy while implementing measures that will lower our energy use, such as efficient lighting installation and control system upgrades
- Our company vehicle fleet, by reducing emissions from fuel consumption through continued adoption of hybrid vehicles and alternative fuel sources as substitutes for diesel and gasoline
- Our maintenance practices, by implementing ways to reduce leaks of sulfur hexafluoride (SF6), a potent greenhouse gas commonly used as an insulator in electric equipment, in addition to adopting innovative solutions to replace this gas with less carbon-intensive alternatives

***Engineering Energy Efficiency Solutions for Our Customers***

Eversource is a national leader in designing and delivering energy efficiency solutions to our customers. We raise awareness of energy efficiency within our communities, local schools and our workforce using multiple outreach channels to create a culture of responsible energy consumers.

We empower our customers by providing information on cutting-edge products and services including custom energy management tools. Using a combination of upfront incentives and product financing, our energy efficiency programs are reaching more customers than ever.

***Developing Infrastructure and Facilitating the Integration of Renewables***

Eversource is a leader in the creation and operation of energy infrastructure that delivers renewable and low-carbon energy to New England. We continue to support competitively priced clean energy through substantial contractual commitments so that clean energy is part of our region's energy mix. Our partnership with Ørsted will expand our clean energy portfolio and enable at least 4,000 megawatts (MW) of offshore wind.

In March 2021, Massachusetts passed new legislation authorizing electric and gas distribution companies to own and operate solar generation facilities that are paired, where feasible, with energy storage facilities on land owned by the distribution company. Eversource is pursuing opportunities to build solar projects that will help meet the Commonwealth's goal to achieve net zero carbon emissions by 2050.

# TCFD *(continued)*

***Natural Gas — Driving Toward a Cleaner Energy Future***

Eversource is committed to support our state efforts to decarbonize the heating sector, transitioning from fossil fuels to cleaner heating sources. As we develop pathways to introduce cleaner natural gas solutions and new technologies that leverage gas infrastructure in a decarbonized environment, we are focused on near-term opportunities to optimize our current system to reduce carbon emissions. These include continuing to identify and remediate gas leaks, testing networked geothermal technology as a building heating and cooling alternative to natural gas, piloting a gas demand response program and studying ways to make our natural gas supply cleaner through the use of renewable and production-certified natural gas.

Natural gas plays an important role in helping to power and heat society safely, reliably and affordably and it can continue to do so while becoming cleaner and more efficient.

***Contributing to Severe Weather Resiliency and Adaptation***

We have a robust resiliency plan to improve our system's ability to withstand severe weather patterns. The plan includes installing new and stronger infrastructure like poles, wires and related system equipment, as well as enhanced year-round tree trimming. We are reinforcing existing critical facilities to withstand storm surges and all future substations are being "flood hardened" to better protect our system against storm surges associated with the increasing risk of severe weather.

We created our comprehensive emergency preparedness and response plans in partnership with state and community leaders so that when a storm occurs, we can provide customers and municipalities with timely and accurate information, while safely and promptly restoring power.

Additionally, we collaborate with other utility providers and industry partners across the country to better understand storm hazards and develop green solutions to improve our system reliability; this includes our partnership with the Eversource Energy Center at the University of Connecticut.

***Supporting Electric Vehicles and Other Emerging Technologies***

We are engaged with policy leaders, automakers, neighboring utilities and technical experts to prepare our infrastructure to support EVs. We are using multiple channels to provide information to our customers considering a switch to an EV. We are also evaluating infrastructure needs to support new technologies in the region, such as microgrids, interconnection of renewable energy and a networked geothermal pilot.

A summary of our response to the TCFD-recommended disclosures follows:

| | |
|---|---|
| **Governance** | |
| Describe the board's oversight of climate-related risks and opportunities | TCFD Disclosure |
| | Proxy Statement |
| | Annual Report |
| | CDP Section 1 |
| Describe management's role in assessing and managing climate-related risks and opportunities | Annual Report |
| **Strategy** | |
| Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term | TCFD Disclosure |
| | Climate Change |
| | CDP Sections 2 and 3 |
| Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning | Proxy Statement |
| | Annual Report |
| | CDP Sections 2 and 3 |
| Describe the resiliency of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario | CDP Section 3 |
| | Proxy Statement |
| | Annual Report |
| **Risk Management** | |
| Describe the organization's processes for identifying and assessing climate-related risks | TCFD Disclosure |
| | Climate Change |
| | Proxy Statement |
| | Annual Report |
| | CDP Sections 2 and 3 |
| Describe the organization's processes for managing climate-related risks | Climate Change |
| | Proxy Statement |
| | Annual Report |
| | CDP Sections 2 and 3 |
| Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management | Proxy Statement |
| | Annual Report |
| | CDP Sections 2 and 3 |
| **Metrics and Targets** | |
| Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process | Climate Change |
| | Carbon Neutrality Goal |
| | Our Footprint |
| | CDP Section 4 |
| Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks | Carbon Neutrality Goal |
| | Our Footprint |
| | By The Numbers |
| | Proxy Statement |
| | CDP Sections 6 and 7 |
| Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets | Climate Change |
| | Carbon Neutrality Goal |
| | Our Footprint |

# Sustainable Accounting Standards Board (SASB)

## SASB Electric Utilities & Power Generators Standard Metrics

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **Greenhouse Gas Emissions & Energy Resource Planning** | | |
| IF-EU-110a.1 | (1) Gross global Scope 1 emissions | By the Numbers |
| | (2) Percentage covered under emissions-limiting regulations | CDP 5.1 -5.2 |
| | (3) Percentage covered under emissions-reporting regulations | CDP 5.1 -5.2 |
| IF-EU-110a.2 | Greenhouse gas (GHG) emissions associated with power deliveries | Scope 2, line loss |
| IF-EU-110a.3 | Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets | Material Topics<br>CDP Sections 2 and 3<br>Carbon Neutrality Goad |
| IF-EU-110a.4 | (1) Number of customers served in markets subject to renewable portfolio standards (RPS) | 100% |
| | (2) percentage fulfillment of RPS target by market | Not publicly reported |
| **Air Quality** | | |
| IF-EU-120a.1 | Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) lead (Pb) and (5) mercury (Hg); percentage of each in or near areas of dense population | By the Numbers |
| **Water Management** | | |
| IF-EU-140a.1 | (1) Total water withdrawn | We do not have water withdrawal related to generation as Eversource's only generation consists of 70 MW of solar power. Eversource's water withdrawal, distribution and consumption related to our water utility, Aquarion Water Company, is reported in our Eversource Sustainability Report along our facility municipal water use.<br><br>By The Numbers<br>Material Topics |
| | (2) total water consumed | |
| | (3) Percentage of each in regions with High or Extremely High Baseline Water Stress | |
| IF-EU-140a.2 | Number of incidents of non-compliance associated with water quantity and/or quality permits, standards and regulations | |
| IF-EU-140a.3 | Description of water management risks and discussion of strategies and practices to mitigate those risks | |
| **Coal Ash Management** | | |
| IF-EU-150a.1 | Amount of coal combustion residuals (CCR) generated, percentage recycled | Not applicable as Eversource only owns solar generation |
| IF-EU-150a.2 | Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment | |

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **Energy Affordability** | | |
| IF-EU-240a.1 | Average retail electric rate for (1) residential customers, (2) commercial customers, (3) industrial customers | By the Numbers |
| IF-EU-240a.2 | Typical monthly electric bill for residential customers for (1) 500 kWh of electricity delivered per month, (2) 1,000 kWh of electricity delivered per month | By the Numbers |
| IF-EU-240a.3 | Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days | Not publicly reported |
| IF-EU-240a.4 | Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory | Eversource website - About Your Bill |
| **Workforce Health & Safety** | | |
| IF-EU-320a.1 | (1) Total recordable incident rate (TRIR), (2) fatality rate | By the Numbers |
| | (3) near miss frequency rate (NMFR) | Not currently reported |
| **End-Use Efficiency & Demand** | | |
| IF-EU-420a.1 | Percentage of electric utility revenues from rate structures that (1) are decoupled, (2) contain a lost revenue adjustment mechanism (LRAM) | Eversource Annual Report |
| IF-EU-420a.2 | Percentage of electric load served by smart grid technology | EEI AGA ESG Template |
| IF-EU-420a.3 | Customer electricity savings from efficiency measures, by market | By the Numbers |
| **Nuclear Safety & Emergency Management** | | |
| IF-EU-540a.1 | Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column | Not applicable as Eversource only owns solar generation |
| IF-EU-540a.2 | Description of efforts to manage nuclear safety and emergency preparedness | Eversource Annual Report |
| **Grid Resiliency** | | |
| IF-EU-550a.1 | Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations | Not publicly reported |
| IF-EU-550a.2 | (1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI) | By the Numbers |
| | (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days | Not publicly reported |
| IF-EU-000.A | Number of customers served (1) residential, (2) commercial, (3) industrial | By the Numbers |
| IF-EU-000.B | Total electricity delivered to (1) residential customers, (2) commercial customers, (3) industrial customers, (4) all other retail customers, (5) wholesale customers (MWh) | By the Numbers |
| IF-EU-000.C | Length of transmission and distribution lines | By the Numbers |
| IF-EU-000.D | Total electricity generated, percentage by major energy source, percentage in regulated markets: solar | EEI AGA ESG Template |
| IF-EU-000.E | Total wholesale electricity purchased (MWh) | Not publicly reported |

# SASB *(continued)*

## SASB Gas Utilities Distributors Standard Metrics

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **Energy Affordability** | | |
| IF-GU-240a.1 | Average retail gas rate for (1) residential customers, (2) commercial customers, (3) industrial customers, (4) transportation services only | By the Numbers |
| IF-GU-240a.2 | Typical monthly gas bill for residential customers for (1) 50 MMBtu of gas delivered per year, (2) 100 MMBtu of gas delivered per year | By the Numbers |
| IF-GU-240a.3 | Number of residential customer gas disconnections for non-payment, percentage reconnected within 30 days | Not publicly reported |
| IF-GU-240a.4 | Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory | Eversource website - About Your Bill |
| **End-Use Efficiency** | | |
| IF-GU-420a.1 | Percentage of gas utility revenues from rate structures that (1) are decoupled, (2) contain a lost revenue adjustment mechanism (LRAM) | Eversource Annual Report |
| IF-GU-420a.2 | Customer gas savings from efficiency measures by market | By the Numbers |
| **Integrity of Gas Delivery Infrastructure** | | |
| IF-GU-540a.1 | Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO) and (3) Notices of Probable Violation (NOPV) | Not publicly reported |
| IF-GU-540a.2 | Percentage of distribution pipeline that is (1) cast and/or wrought iron, (2) unprotected steel | Eversource reports miles of main in our EEI AGA ESG Template |
| IF-GU-540a.3 | Percentage of gas (1) transmission and (2) distribution pipelines inspected (% by length) | Not publicly reported |
| IF-GU-540a.4 | Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions | Carbon Neutrality Goal<br>Decarbonizing the Heating Sector<br>Material Topics |
| **Activity Metrics** | | |
| IF-GU-000.A | Number of (1) residential, (2) commercial and (3) industrial customers served | By the Numbers |
| IF-GU-000.B | Amount of natural gas delivered to (1) residential customers, (2) commercial customers, (3) industrial customers and (4) transferred to a third party (MMBtu) | By the Numbers |
| IF-GU-000.C | Length of gas transmission and distribution lines (km) | Eversource Annual Report |

## SASB Water Utilities Services Standard Metrics

| | | |
|---|---|---|
| **Energy Management** | | |
| IF-WU-130a.1 | Total energy consumed | Our Aquarion business consumed 167,725 GJ of electricity in 2021 |
| | Percentage grid electricity | 99.86% |
| | Percentage renewable | 0.14% |
| **Distribution Network Efficiency** | | |
| IF-WU-140a.1 | Water main replacement rate | 0.617% |
| IF-WU-140a.2 | Volume of non-revenue real water losses (m3) | 17,908,794.14 GJ |

## SASB Water Utilities Services Standard Metrics

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **Effluent Quality Management** | | |
| IF-WU-140b.1 | Number of incidents of non-compliance associated with water effluent quality permits, standards and regulations | 0 |
| IF-WU-140b.2 | Discussions of strategies to manage effluents of emerging concern | Material Topics<br>Aquarion does not own any wastewater treatment operations |
| **Water Affordability & Access** | | |
| IF-WU-240a.1 | Average retail water rate for (1) residential customers, (2) commercial customers, (3) industrial customers (per CCF) | By the Numbers |
| IF-WU-240a.2 | Typical monthly water bill for residential customers for 10 Ccf of water delivered per month | By the Numbers |
| IF-WU-240a.3 | Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days | Not publicly reported |
| IF-WU-240a.4 | Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory | In response to COVID-19, Aquarion provided customers experiencing financial difficulties a variety of alternative payment plan options. Aquarion Customer Care |
| **Drinking Water Quality** | | |
| IF-WU-250a.1 | Number of (1) acute health-based, (2) non-acute health-based and (3) non-health-based drinking water violations | By the Numbers<br>Tier 1 = 0<br>Tier 2 = 1<br>Tier 3 = 3 |
| IF-WU-250a.2 | Discussion of strategies to manage drinking water contaminants of emerging concern | Aquarion fulfills the requirements of the USEPA UCMR program which includes sampling in water systems than serve more than 95% of our customers. For PFAS we have sampled our production facilities in all water systems, regardless of size and made this information available in our annual CCR and on our website. While PFAS is not yet regulated at the federal level, it is regulated in two of the states Aquarion serves (Massachusetts and New Hampshire). In Connecticut, we continue to perform additional sampling in anticipation of state or federal regulation of PFAS. Treatment or other solutions to ensure compliance with PFAS regulation is under consideration and will be incorporated into our capital program. |

# SASB *(continued)*

## SASB Water Utilities Services Standard Metrics

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **End-Use Efficiency** | | |
| IF-WU-420a.1 | Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience | 92% |
| IF-WU-420a.2 | Customer water savings from efficiency measures, by market (m3) | Aquarion has not assessed its reported water savings in terms of the IPM&V Protocol. Comparing seasonal/summer consumption data in Southwest Fairfield County Connecticut, pre and post implementation of our mandatory twice weekly irrigation program we have achieved an average annual reduction in demand of more than 2.8 million m3. |
| **Water Supply Resilience** | | |
| IF-WU-440a.1 | Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party (m3, %) | 0 water is sourced from regions with high or extremely high baseline water stress. |
| IF-WU-440a.2 | Volume of recycled water delivered to customers (m3) | 3,560,838 m3 |
| IF-WU-440a.3 | Discussion of strategies to manage risks associated with the quality and availability of water resources | Aquarion Water Management<br>Material Topics<br>Aquarion evaluates demand and supply on 5-, 20-, and 50-year time horizons to ensure appropriate short and long-term planning around adequacy of supply. We actively invest in capital improvements to increase system capacity; evaluate potential system interconnections; seek to develop additional sources of supply; and work to control non-revenue water. Decoupled rates and a revenue adjustment mechanism in Connecticut, where the majority of water customers reside, allow us to invest in customer conservation programs in an effort to reduce demands. |
| Network Resiliency & Impacts of Climate Change | | |
| IF-WU-450a.1 | Wastewater treatment capacity located in 100-year flood zones (m3 per day) | Not applicable |
| IF-WU-450a.2 | (1) Number and (2) volume of sanitary sewer overflows (SSO), (3) percentage of volume recovered (m3, %) | Not applicable |

| SASB Code | Metric/Activity Metric | Eversource Information Source |
|---|---|---|
| **Activity Metrics** | | |
| IF-WU-450a.3 | (1) Number of unplanned service disruptions and (2) customers affected, each by duration category | In 2021, Aquarion had 318 unplanned service disruptions, of which 66% were restored in less than 4 hours, 33% between 4 and 12 hours and only 2 were longer than 12 hours (1%). The average number of customers per outage was 17. As part of our emergency preparedness procedures, Aquarion provides standby power to its facilities in order to provide uninterrupted service, even during severe storms. |
| IF-WU-450a.4 | Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure | Climate Change<br>Material Topics<br>Aquarion is working to mitigate the overall severity of climate change by working toward our carbon neutrality goal. In addition, we are preparing for more frequent and severe storms. The majority of our facilities have standby power or the ability to connect portable generators. We assess and remove hazard trees where a potential to damage water infrastructure is identified. Our conservation (demand management) programs are intended to achieve long-term reductions in outdoor water use and change customer habits as seasonal droughts become more likely. We have mapped aquatic invasives and are evaluating alternative management approaches to mitigate water quality impacts. |
| IF-WU-000.A | Number of (1) residential, (2) commercial and (3) industrial customers served | By the Numbers |
| IF-WU-000.B | Total water sourced, percentage by source type | By the Numbers<br>Surface Water 81%<br>Groundwater 18%<br>Third Party (Purchase) 1% |
| IF-WU-000.C | Total water delivered to (1) residential, (2) commercial, (3) industrial and (4) all other customers (MG) | By the Numbers |
| IF-WU-000.D | Average volume of wastewater treated per day, by (1) sanitary sewer, (2) stormwater and (3) combined sewer | Not applicable |
| IF-WU-000.E | Length of (1) water mains and (2) sewer pipe | 3,612 miles of water main, 10,000 feet of sewer main |

# By the Numbers

## Eversource At A Glance

| Key Statistics | As of 2021 Year End |
|---|---|
| Electric Customers | 3,262,000 |
| Gas Customers | 887,000 |
| Water Customers | 226,000 |
| Employees | Over 9,000 |
| Communities Served – Electric | 500 |
| Communities Served - Gas | 190 |
| Communities Served – Water | 68 |
| Service Territory – Electric | 13,230 sq. miles |
| Service Territory - Gas | 4,905 sq. miles |
| Miles of Natural Gas Pipeline | 11,831 miles |
| Transmission Lines | 4,401 circuit miles |
| Distribution Lines | 58,565 circuit miles |
| Transmission and Distribution Water Mains | 3,612 miles |
| Liquefied Natural Gas Plants | 6 facilities |
| Propane Peak Shaving Plants | 2 facilities |
| Liquefied Natural Gas & Propane Plants | 1 facility |
| Generation | 70 MW Solar |
| Operating Revenue | 9,863,100,000 |

## Financial Performance

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Earnings Per Share* | $3.45 | $3.64 | $3.86 |
| Common Dividend | $2.14 | $2.27 | $2.41 |
| Total Shareholder Return | 34.4% | 4.5% | 8.2% |
| Socially Responsible Funds Holding Eversource Shares | 163 | 182 | 201 |

*Earnings Per Share excludes acquisition costs related to the purchase of the natural gas assets of Columbia Gas of Massachusetts on October 9, 2020 and in 2019 excludes the Northern Pass Transmission project impairment charge.

## Small and Diverse Supplier Spend

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Diverse Business Tier 1 | $285.5 Million | $301.6 Million | $330.2 Million |
| Small Business Tier 1 | $467.5 Million | $559.3 Million | $532.1 Million |

## 2021 Charitable Giving

| Eversource Total 2021 Charitable Giving | $5.8 Million* | % Of Total |
|---|---|---|
| Community Wellness and Basic Human Needs | | 66.2% |
| Education | | 9.3% |
| Clean Energy and Environmental Stewardship | | 1.4% |
| Diversity, Equity and Inclusion | | 6.0% |
| Community, Economic and Workforce Development | | 4.9% |
| Charitable Giving - Other | | 2.4% |
| Employee Matching Program | | 9.9% |
| Aquarion 2021 Charitable Giving | $253,470 | |

Click to add text

*In addition to the charitable giving described above, we are proud to support Connecticut tax credit programs that enable the development of low-income and supportive housing and the preservation of historically significant properties. In 2021, these charitable contributions totaled nearly $21 million.

## Economic Benefit

| Benefit | 2021 Total |
|---|---|
| State and Local Taxes Paid | $867 million |
| Funding to economic development groups, chambers of commerce and other business associations | $3 million |
| Member of economic development groups, chambers of commerce and other business associations | 89 |

# By the Numbers *(continued)*

### Employee Statistics

| | As of 12/31/19 | As of 12/31/20* | As of 12/31/21* |
|---|---|---|---|
| Total employees | 8,233 | 9,291 | 9,227 |
| Female employees | 26% | 26% | 26% |
| Minority employees | 18% | 19% | 20% |
| Employees represented by union | 50% | 51% | 53% |
| Turnover rate | 7% | 6% | 9% |
| Under age 30 | 10% | 10% | 11% |
| Age 30-50 | 43% | 43% | 45% |
| Over age 50 | 47% | 47% | 45% |

**2020 and 2021 includes EGMA*

### Diversity Goals

| 2021 Goals | 2021 Results |
|---|---|
| 45% of leadership promotions and new hires will be diverse (minority and female) | 41.2% |
| 48% of external hires will be diverse (minority and female) | 57.3% |
| 53% of external candidates will be diverse (minority and female) | 58.9% |
| 27% of all employees will be female | 26.0% |
| 19% of all employees will be minority | 19.6% |

### Board Composition

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Total board members | 10 | 11 | 12 |
| White | 70% | 64% | 67% |
| Black/African American | 20% | 27% | 25% |
| Asian American | 10% | 9% | 8% |
| Male | 70% | 73% | 75% |
| Female | 30% | 27% | 25% |

Detailed information about our DE&I progress – including demographic and EEO1 data metrics, our policies, practices, programs and journey – can be found online in our 2021 Diversity, Equity & Inclusion Report

### Safety Statistics - Employees

| | 2019 Actual | 2020 Actual | 2021 Target | 2021 Actual | 2022 Target |
|---|---|---|---|---|---|
| OSHA Total Recordable Incident Rate (TRIR) | 1.8 | 1.5 | n/a | 2.0 | n/a |
| OSHA Days Away Restricted Time (DART) Rate - Incident Rate Per 100 Workers | 1.3 | 1.3 | 1.3 | 1.2 | 1.4 |
| Preventable Motor Vehicle Accidents (PMVA) - Incident rate per 1 million miles driven | 1.9 | 2.1 | 2.0 | 1.9 | 1.9 |
| OSHA Lost Time Rate | 0.3 | 0.4 | n/a | 0.7 | n/a |
| Number of Employee Fatalities | 0 | 0 | 0 | 0 | 0 |
| SIF (Serious Injury & Fatality) Actual | 4 | 3 | 3 | 3 | 3 |
| SIF (Serious Injury & Fatality) Potential | 54 | 34 | Track only | 16 | Track only |

### Safety Statistics – Contractors Working on Eversource System

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Number of Contractor Fatalities | 0 | 0 | 0 |
| Contractors Using ISNetworld | Over 325 | 570 | 571 |
| SIF (Serious Injury & Fatality) Actual | 8 | 3 | 3 |
| SIF (Serious Injury & Fatality) Potential | 66 | 51 | 28 |

# By the Numbers *(continued)*

## GHG Emissions (MT CO2e)

| By Scope | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| Scope 1 Emissions | 207,618 | 169,273 | 164,576 | 158,495 |
| Scope 2 Emissions | 612,652 | 530,948 | 512,859 | 551,382 |
| **Total Scope 1 & Scope 2** | 820,270 | 700,221 | 677,435 | 709,877 |

| By Source | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| Line Loss | 545,377 | 481,021 | 472,449 | 510,846 |
| Gas Distribution Leaks | 75,651 | 71,317 | 69,415 | 65,739 |
| Facilities | 119,283 | 70,907 | 58,187 | 57,542 |
| Fleet | 47,223 | 47,380 | 52,324 | 50,823 |
| $SF_6$ Leakage | 32,737 | 29,598 | 25,059 | 24,926 |
| **Total Emissions By Source** | 820,270 | 700,221 | 677,435 | 709,877 |
| **Emissions Intensity*** | 97.09 | 82.12 | 76.08 | 71.97 |

**MT CO2e/Million $US Revenue as reported in 10-K*

## Progress On GHG Goals

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Methane Challenge goal to replace 3% of cast iron and unprotected steel mains annually. Beginning in 2022 we have increased our commitment to 6% annually | 6% | 5% | 7% |
| Transition 50% of facility square footage to LED or other energy-efficient lighting as compared to a 2017 baseline. By the end of 2021 we aimed to have 70% of our facilities transitioned to LED lighting and achieve 100% by the end of 2022 | 51% | 56% | 86% |
| Replace 100% of our overhead trucks with plug-in hybrid electric vehicles by 2030 | | 20% | 23% |
| Replace 50% of all fleet vehicles with hybrid EVs (including some plug-ins) by 2030 | | Less than 1% | 1% |
| EEI commitment: 5% of our annual fleet spend on plugin electric technologies | | 31% | 28% |

## Non-GHG Air Emissions (MT)*

| By Source | EGMA | | | Hopkinton | | | Waterbury | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| PM2.5 | 0.47 | 0.45 | 0.48 | 0.04 | 0.04 | 0.03 | 0.91 | 0.90 | 0.44 |
| PM10 | 0.47 | 0.45 | 0.48 | 0.04 | 0.04 | 0.03 | 0.85 | 0.85 | 0.50 |
| SOx | 0.05 | 0.04 | 0.04 | 0.01 | 0.25 | 0.13 | 0.06 | 0.06 | 0.04 |
| NOx | 6.83 | 7.02 | 6.90 | 113.21 | 117.20 | 121.17 | 11.15 | 11.15 | 5.86 |
| VOC | 0.37 | 0.39 | 0.36 | 37.96 | 33.68 | 41.10 | 0.58 | 0.58 | 0.32 |
| Other Hazardous Air Pollutants | 0.69 | 0.71 | 0.72 | 6.85 | 5.33 | 5.54 | 0.27 | 0.27 | 0.11 |

**Eversource reports air pollutants for MA and CT liquified natural gas (LNG) facilities in accordance with regulatory requirements.*

## State Renewable Portfolio Standards & Clean Energy Standards

| | 2021 | 2022 | 2025 |
|---|---|---|---|
| Connecticut | 30.50% | 33.00% | 38.00% |
| Massachusetts* | 49.26% | 51.30% | 58.17% |
| New Hampshire | 21.60% | 22.50 % | 25.20% |

*Massachusetts requirements include Renewable Energy Portfolio Standards and Clean Energy Standards. Beginning in 2021, Massachusetts added an additional requirement to procure 20% of retail suppliers load from existing clean energy sources (CES-E). 2025 value is an estimate.*

# By the Numbers *(continued)*

## Waste Summary*

| Destination | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| | Non-Hazardous | Hazardous | Non-Hazardous | Hazardous | Non-Hazardous | Hazardous |
| **Directed to Disposal (MT)** | | | | | | |
| Landfill | 12,042 | 2,983 | 23,540 | 10,241 | 20,122 | 3,829 |
| Incineration with Energy Recovery | 1,926 | - | 1,935 | - | 2,612 | 3 |
| Incineration without Energy Recovery | - | 606 | 1,314 | 1,771 | 5,055 | 159 |
| ***Total waste disposed*** | | ***17,556*** | | ***38,801*** | | ***31,780*** |
| **Diverted from Disposal (MT)** | | | | | | |
| Recycled | 3,984 | 102 | 5,331 | 6 | 5,687 | 15 |
| Reclaimed as Investment Recovery | 9,020 | - | 12,352 | | 14,952 | - |
| ***Total waste sent for beneficial use*** | | ***13,106*** | | ***17,689*** | | ***20,654*** |

**EGMA data reflected as of 2021, our first full year following the acquisition of this business.*

## Environmental Non-Compliance[1]

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Number of Citations | 3 | 3 | 2 |
| Penalties (USD) | $8,625 | $138,053 | $0 |

*Our 2021 citations were due to administrative errors, which were promptly corrected. [1]Violations are listed in the year that they occurred. Final enforcement and any penalties may have been incurred in future years. Some enforcement may involve additional entities.*

## Aquarion Water Company Violations Associated with the Clean Drinking Water Act[1]

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Aquarion Violations* | 12 | 9 | 4 |

**Aquarion's violations in 2021 are all Tier 3 and Tier 2 violations; examples include failures to report in the required timeframe and administrative violations. [1]Violations are listed in the year that they occurred. Final enforcement and any penalties may have been incurred in future years. Some enforcement may involve additional entities..*

## Electricity Consumption

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Total Electricity Consumption (MWh) | 206,621 | 178,261 | 166,319 |

## Water Summary 2021

| Facility Water Use | Water Consumed (Gal) |
|---|---|
| New Hampshire | 2,174,809 |
| Massachusetts | 16,704,266 |
| Connecticut | 10,200,004 |
| ***Total Facility Water Use*** | ***29,079,079*** |

| Aquarion Business (Excluding Facilities) | Water Withdrawal (Gal) |
|---|---|
| Surface Water | 24,720,274,900 |
| Ground Water* | 5,532,949,496 |
| Third Party Water (Purchased) | 437,458,800 |
| ***Total Water Intake*** | ***30,690,683,196*** |

**Groundwater withdrawn includes water pumped from remedial wells used to intercept salt contamination plume. The water was subsequently discharged to the nearby surface water in accordance with our permit.*

| | |
|---|---|
| Water Distribution (Production Net) | 30,529,084,093 |
| Total Water Sold (metered) | 25,801,162,439 |
| Non-Revenue Water | 4,727,921,654 |

# By the Numbers *(continued)*

### Online Distributed Generation As of December 31, 2021 (kW)

| | Solar | Wind | Hydro | CHP | Other | Total |
|---|---|---|---|---|---|---|
| Connecticut | 693,934 | 5,079 | 111,674 | 153,018 | 83,919 | 1,047,624 |
| Massachusetts Eastern Electric | 821,649 | 38,135 | 222 | 169,140 | 4,116 | 1,033,262 |
| Massachusetts Western Electric | 302,327 | 17,127 | 40,328 | 50,391 | 76,492 | 486,664 |
| New Hampshire | 113,164 | 38,548 | 131,078 | 14,776 | 94,165 | 391,731 |
| TOTAL | **1,931,074** | **98,889** | **283,301** | **387,325** | **258,692** | **2,959,281** |

### Reliability Performance Measures

| | 2019 Actual | 2019 Target | 2020 Actual | 2020 Target | 2021 Actual | 2021 Target |
|---|---|---|---|---|---|---|
| Electric Reliability* - Average Number of Months Between Interruptions (12 ÷ SAIFI) | 21.6 | 16.8 | 19.2 | 17.4 | 19.2 | 18.2 |
| Electric Restoration* - Average outage minutes experienced by all customers in a year (SAIDI) | 59.2 | 76.4 | 64.0 | 75.0 | 69.8 | 73.4 |
| Gas Emergency Response -Respond to Site Within Specific Time Threshold (set by state regulators)** | 99.7% | 99.2% | 99.6% | 99.2% | 97.7% | 95.0% |

**IEEE-1366 2.5 Beta Method, Excluding Planned Outages is used for electric reliability calculations.*
***In 2021, Gas Emergency metric adjusted to reflect more challenging target of 45 minutes in MA, down from 60 minutes which was used in previous years*

### 2021 Electric Customers & Electricity Delivered

| | Residential Customers | Commercial Customers | Industrial Customers | Street Lighting Customers |
|---|---|---|---|---|
| Number Served | 2,866,463 | 371,486 | 7,270 | 16,299 |
| Total Electricity Delivered (MWh) | 21,729,307 | 24,552,400 | 4,728,160 | |

### 2021 Gas Customers & Natural Gas Delivered

| | Residential Customers | Commercial Customers | Industrial Customers | Electricity Generating Facilities |
|---|---|---|---|---|
| Number Served | 796,931 | 86,242 | 3,336 | 7 |
| Total Natural Gas Delivered (MMBtu) | 60,409,724 | 58,820,287 | 36,235,819 | 15,524,108 |

### 2021 Water Customers & Water Delivered

| | Residential Customers | Commercial Customers | Industrial Customers |
|---|---|---|---|
| Number Served | 204,702 | 18,653 | 3,048 |
| Total Water Delivered (MG) | 18,678.5 | 5,916.5 | 1,206 |

# By the Numbers *(continued)*

### 2021 Average Retail Electric Rate (cents/kwh)

| | Residential Customers | Commercial Customers | Industrial Customers |
|---|---|---|---|
| Connecticut | 21.17 | 16.37 | 16.14 |
| New Hampshire | 19.40 | 16.22 | 14.16 |
| Massachusetts | 24.22 | 20.05 | 20.64 |

### 2021 Typical Monthly Bill - Electric Residential Customers

| | For 500 KWh of electricity delivered per month | For 1,000 KWh of electricity delivered per month |
|---|---|---|
| Connecticut | $105.85 | $211.70 |
| New Hampshire | $97.00 | $194.00 |
| Massachusetts | $121.08 | $242.17 |

### 2021 Average Retail Gas Rate ($/MMBtu)

| | Residential Customers | Commercial Customers | Industrial Customers |
|---|---|---|---|
| Connecticut Sales | 18.08 | 12.2 | 8.81 |
| Connecticut Transportation | 5.6 | 4.14 | 2.56 |
| Massachusetts Sales | 16.4 | 10.6 | 10.3 |
| Massachusetts Transportation | 8.8 | 4.9 | 2.6 |

### 2021 Typical Monthly Bill - Gas Residential Customers

| | For 50 MMBtu of gas delivered per year | For 100 MMBtu of gas delivered per year |
|---|---|---|
| Connecticut | $76.73 | $153.26 |
| Massachusetts | $68.33 | $136.67 |

### 2021 Average Retail Water Rate (per CCF)

| | Residential Customers | Commercial Customers | Industrial Customers |
|---|---|---|---|
| Connecticut | $6.02 | $4.52 | $2.89 |
| New Hampshire | $7.87 | $6.61 | $6.88 |
| Massachusetts | $6.95 | $4.41 | $2.58 |

### 2021 Typical Monthly Bill - Water Residential Customers

| | For 10 Ccf of water delivered per month |
|---|---|
| Connecticut | $42.67 |
| New Hampshire | $39.23 |
| Massachusetts | $35.63 |

# By the Numbers *(continued)*

### Energy Efficiency Performance – Electric Customers

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Instances of Customer Participation | 2,718,527 | 2,350,152 | 1,962,687 |
| Spend (US$) | $451,716,689 | $465,771,508 | $512,447,290 |
| Annual kWh Savings | 902,463,836 | 951,718,781 | 820,443,906 |
| Lifetime kWh Savings | 8,639,420,934 | 13,546,673,079 | 8,775,887,375 |
| Summer Peak Annual kW Savings | 133,388 | 147,300 | 124,414 |
| Winter Peak Annual kW Savings | 145,778 | 178,658 | 170,387 |
| Annual CO2e reduced in Metric Tons | 247,288 | 245,462 | 241,623 |
| Lifetime CO2e reduced in Metric Tons | 2,645,989 | 3,772,891 | 3,112,528 |
| Customer $$ Saved Annually | $175,510,531 | $190,600,927 | $192,044,046 |
| Customer $$ Saved Lifetime | $1,708,825,391 | $2,745,954,013 | $2,256,789,464 |

### Energy Efficiency Performance – Gas Customers

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Instances of Customer Participation | 210,613 | 166,006 | 86,153 |
| Spend (US$) | $72,072,331 | $119,298,578 | $162,164,672 |
| Annual Therms Savings | 8,586,307 | 9,559,606 | 14,835,197 |
| Lifetime Therms Savings | 119,238,067 | 152,705,339 | 220,844,503 |
| Annual CO2e reduced in Metric Tons | 41,295 | 66,569 | 78,497 |
| Lifetime CO2e reduced in Metric Tons | 661,460 | 1,040,994 | 1,168,546 |
| Customer $$ Saved Annually | $10,751,135 | $10,394,260 | $16,094,129 |
| Customer $$ Saved Lifetime | $154,001,787 | $163,754,101 | $240,176,580 |

### 2022 Energy Efficiency Goals - Electric

| | NH Electric | MA Electric | CT Electric |
|---|---|---|---|
| Spend (US$) | $42,148,800 | $313,455,000 | $157,117,706 |
| Annual kWh Savings | 73,000,000 | 208,549,706 | 158,810,341 |
| Summer Peak kW Savings | 9,000 | 30,303 | 29,314 |
| Winter Peak kW Savings | 8,500 | 27,521 | 27,787 |
| Annual MMBTU Savings from Fossil Fuels* | 42,720 | 307,010 | 207,419 |

*DISCLAIMER: Please note that the above table is for planning purposes only.*

**Fossil fuel savings shown include expected impacts of electrification efforts.*

### 2022 Energy Efficiency Goals - Gas

| | MA Gas - Nstar | MA Gas - EGMA | CT Gas - Yankee |
|---|---|---|---|
| Spend (US$) | $79,540,000 | $69,545,000 | $17,033,844 |
| Annual Therms Savings | 4,388,455 | 4,417,197 | 1,566,023 |

*DISCLAIMER: Please note that the above table is for planning purposes only.*

# By the Numbers *(continued)*

| Supplier Sustainability Questions Asked in RFPs 2021 | |
|---|---|
| **Does this supplier have a current statement or policy related to sustainability and/or reducing environmental impact?** | |
| Does not have a statement or policy | 44% |
| Has statement or policy | 56% |
| **Does the supplier offer customers environmental improvement opportunities?** | |
| Has opportunities for this specific project | 26% |
| No environmental improvement opportunities | 34% |
| Offers improvement opportunities but none that benefit this project | 40% |
| Opportunity Implemented | 1% |
| **Does this supplier have any community engagement programs?** | |
| Does not have programs | 29% |
| Has community engagement programs | 71% |
| **Does this supplier publicly report voluntary goals to reduce energy consumption, emissions, waste or water in your operations?** | |
| Does not report any goals | 85% |
| Publicly reports multiple goals | 9% |
| Reports a goal | 6% |
| **Has this supplier been cited for non-compliance of an environmental and/or labor issue in the last 5 years?** | |
| 3 or fewer Notice of Violations within 5 years with corrective actions taken | 12% |
| More than 3 Notice of Violations and/or fines | 3% |
| No Violations or fines | 86% |
| **Does this supplier have any workforce development programs?** | |
| Has a program | 73% |
| No programs | 27% |
| **Has this supplier received any sustainability awards and/or recognition?** | |
| Local awards | 14% |
| Multiple National or Regional awards | 15% |
| No awards | 71% |
| **Does this supplier publicly report greenhouse gas emissions?** | |
| Does not publicly report emissions | 85% |
| Publicly reports emissions | 15% |
| **Is this supplier compliant with the Diversity & Inclusion language in the Supplier Code of Business Conduct 2017?** | |
| Compliant | 96% |
| Not compliant | 4% |

2021

# SUSTAINABILITY Report

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Decision Matrix-Resistance Substation

| | Weight | **Option 1**<br>Portsmouth | **Option 1 (Alternative)**<br>Portsmouth<br>without Series BT | **Option 2**<br>Cutts St 115 kV | **Option 3**<br>Rebuild Resistance | |
|---|---|---|---|---|---|---|
| **Summary of Resistance Project Scope:** | | New Portsmouth 3127 breaker<br>New Portsmouth 3127 feeder<br>Portsmouth 34.5 kV Series BT<br>Portsmouth 115 kV Series BT<br>Removal & Remediation of Resistance<br>Removal of Schiller T130 breaker | New Portsmouth 3127 breaker<br>New Portsmouth 3127 feeder<br>Reconductor Ocean Road 34.5 kV<br>Removal & Remediation of Resistance<br>Removal of Schiller T130 breaker | New Ocean Road 115 kV ring bus<br>New 115 kV E194 Tap Line<br>New Cutts Street 115-12.47 kV<br>Reconductor Ocean Road 34.5 kV<br>Removal & Remediation of Resistance<br>Removal of Schiller T130 breaker | Rebuild Resistance | |
| | 1-10 | 4-5 Superior, 2-3 = Adequate, 0-1 = Inferior | | | | |
| **Distribution System Planning** | | | | | | |
| **Meets Distribution System Planning Guide (DSPG 2020) Design Criteria - Resistance Project**<br>- Base Case Capacity for 10-Year Growth<br>- Restore all load on N-1 Contingencies<br>- 3 Load Block transfer limit for N-1 contingencies<br>- Transmission N-1 not causing a Distribution N-2+ | 10 | Addressess all DSPG design criteria. Does not address Portsmouth 12 kV issues, requires separate project. | Portsmouth Bus Tie Breaker violations exist, but load can be restored. Does not address Portsmouth 12 kV issues, requires separate project. | Addressess all DSPG design criteria. | Addressess all DSPG design criteria. Does not address Portsmouth 12 kV issues, requires separate project. | |
| | Rating: | 5 | 4 | 5 | 5 | |
| **Meets Distribution System Planning Guide (DSPG 2020) Design Criteria - Resistance & Portsmouth Area**<br>- Base Case Capacity for 10-Year Growth<br>- Restore all load on N-1 Contingencies<br>- 3 Load Block transfer limit for N-1 contingencies<br>- Transmission N-1 not causing a Distribution N-2+ | 10 | Requires additional project to address the Portsmouth 12 kV system (Mill Pond and Cutts Street). | Requires additional project to address the Portsmouth 12 kV system (Mill Pond and Cutts Street). | Addressess all DSPG design criteria. | Requires additional project to address the Portsmouth 12 kV system (Mill Pond and Cutts Street). | |
| | Rating: | 3 | 3 | 5 | 3 | |
| **MWh at Risk - Resistance Project**<br>Customer load at risk of a sustained outage during a contingency event for the scope of Resistance only. | 8 | All customers can be restored for N-1 conditions.<br>0 MWh at risk | Load isolated for bus tie breaker failure.<br>19774 MWh at risk | All customers can be restored for N-1 conditions.<br>0 MWh at risk | All customers can be restored for N-1 conditions.<br>0 MWh at risk | |
| | Rating: | 5 | 3 | 5 | 5 | |
| **MWh at Risk - Resistance & Portsmouth Area**<br>Customer load at risk of a sustained outage during a contingency event for the scope of Resistance and other area projects. | 8 | Mill Pond N-1, Cutts Street N-0, and Ocean Road (T)N-1 remain.<br>33502 MWh at risk | Mill Pond N-1, Cutts Street N-0, and Ocean Road (T)N-1 remain.<br>53276 MWh at risk | Addresses all N-0 and N-1 risk within the Portsmouth area bulk distribution system.<br>0 MWh at risk | Mill Pond N-1, Cutts Street N-0, and Ocean Road (T)N-1 remain.<br>33502 MWh at risk | |
| | Rating: | 3 | 2 | 5 | 3 | |
| **Headroom Capacity**<br>The headroom values here are the ability to pick up additional step loads in the near term without triggering criteria violations or exceeding capacity constraints. Capacity is based on the most contraining capacity limit (base case or first contingency).<br>*Explination of the calculation of the headroom can be found in the body of the report.* | 5 | 94 MW | 55 MW | 97 MW | 145 MW | |
| | Rating: | 3 | 1 | 3 | 5 | *Rating Calculated.* |
| **Distribution System Loss**<br>Calculated from Synergi loadflow model. | 3 | 3.23 MW | 3.23 MW | 3.09 MW | 3.24 MW | |
| | Rating: | 4 | 4 | 5 | 4 | |
| **Substation Design Engineering** | | | | | | |
| **Constructability**<br>Land availability, siting and permitting challenges, expandability contraints, ability to take outages for construction. | 8 | Concern over the inability to get approved outages in order to remove and construct new series bus tie breakers. | Lines and breaker can be in service with minimal impact to the system to enable retirement of Resistance. | Land availability, permitting, and expandability concens at Cutts Street property. | It's not believed that there is enough land to be able to rebuild in place. | |
| | Rating: | 3 | 5 | 3 | 1 | |
| **Environmental Impact**<br>Environmental impact, positive or negative, based on contruction and end-state/design of the solution. | 5 | Substation work contained within existing substation yards. Resistance Substation site fully remediated. | Substation work contained within existing substation yards. Resistance Substation site fully remediated. | New expanded Cutts Street Substation for new bulk substation equipment. Resistance Substation site fully remediated. | Construction impact to only Resistance, may disturb soil. Full remediation not expected if rebuilt. | |
| | Rating: | 5 | 5 | 4 | 3 | |
| **Transmission Line Engineering** | | | | | | |
| **Constructability**<br>Land availability, siting and permitting challenges, expandability contraints. | 8 | Minimal impact to construct new 0.5 mile 34.5kV line. Possibly able to re-use existing T13 115kV line based on inspection reports. | Minimal impact to construct new 0.5 mile 34.5kV line. Possibly able to re-use existing T13 115kV line based on inspection reports. Reconductoring of the Ocean Road lines most likely will prompt structure replacements to accommodate the additional weight and spans for using 795 ACSR. | Reconductoring of the Ocean Road lines most likely will prompt structure replacements to accommodate the additional weight and spans for using 795 ACSR. Possibly would have to de-energize and deconstruct 3214 and 339 line in order to make room for a 115kV line. Even with removing those lines, we still may not have enough room for a 115kV line. It would have to be monopole structures averaging 80'-100' pole heights in peoples back yards. The terminal into Cutts St would be tough since there is limited space to turn the line in. Pushing this project through with the City of Portsmouth could prove to be a heavy lift. | Minimal line work if anything required. | |
| | Rating: | 4 | 4 | 1 | 5 | |
| **Environmental Impact**<br>Environmental impact, positive or negative, based on contruction and end-state/design of the solution. | 5 | Minimal impact to construct new 0.5 mile 34.5 kV feeder. | Requires reconductoring of two 34.5 kV lines from Ocean Road in a right of way that is mostly wetlands. Minimal impact to construct new 0.5 mile 34.5 kV feeder. | Requires reconductoring of two 34.5 kV lines from Ocean Road in a right of way that is mostly wetlands. New 115 kV line to be constructed to Cutts Street. | No line work required. | |
| | Rating: | 4 | 3 | 2 | 5 | |
| **System Operations** | | | | | | |
| **Customer Exposure**<br>Reliability and Power Quality impact. Based on largest number of customers per bulk substation source. | 4 | 4,635 customers - New arrangement of 3850 and combined 367 & 339 on Portsmouth TX107. | 4,635 customers - New arrangement of 3850 and combined 367 & 339 on Portsmouth TX107. | 2,897 customers - Jackson Hill and Cutts Street on new 115-12.47 kV Cutts Street transformer. | 4,855 customers - Current number of customers supplied by Resistance TB79. | |
| | Rating: | 0 | 0 | 5 | 0 | *Rating Calculated.* |

Decision Matrix-Resistance Substation

| | | | | | | |
|---|---|---|---|---|---|---|
| **System Operation**<br>Ability to take equipment out of service for maintenance, spread of customer counts across different feeders. | 10 | Doesn't support area contingency coverage as well as Cutt Street option, higher individual line loadings at Portsmouth make outages harder to pick up or plan for. Doesn't address the issues that 3 out of 5 Portsmouth -12kv substations are fed from the same source and issues that brings. | Not as reliable as option 1 or 2 | New source into load pocket will provide additional contingency coverage for loss of area 12kv transformers, and for loading/contingency coverage during outages on TB171,U181, S153,H141, 3171 and 3670 | Less line loading on individual circuits during high load periods. | |
| | Rating: | 2 | 1 | 5 | 3 | |
| **Substation Operations** | | | | | | |
| **Operating Cost & Maintenance**<br>Cost and ability to perform ongoing/future maintenance. | 4 | Does not address maintenance and safety concerns at Resistance quickly enough. | Removes Resistance the soonest removing the maintenance needs of the substation. | Does not address maintenance and safety concerns at Resistance quickly enough. | Does not address maintenance and safety concerns at Resistance quickly enough. | |
| | Rating: | 3 | 5 | 3 | 3 | |
| **Project Cost and Timing** | | | | | | |
| **Solution Timeline**<br>Ability to address the retirement of Resistance in a timely fashion. | 10 | Requires work at Portsmouth (series bus tie breakers T&D), feeder breaker and 34.5 kV line. | Simplistic approach requires only a breaker and feeder construction to allow for retirement of Resistance. | Requires construction of Ocean Road, transmission 115 kV line (3 years), and Cutts Street prior to retirement of Resistance. Both budget and contruction timelines delay retirement. | Budget constraints expected to delay ability to rebuild Resistance. | |
| | Rating: | 3 | 5 | 0 | 3 | |
| **T&D Project Cost - Resistance Project**<br>Direct comparison of project solution option costs for addressing Resistance Substation. | 8 | $12M | $5.2M | $47M | $10M | |
| | Rating: | 4 | 5 | 0 | 4 | *Rating Calculated.* |
| **T&D Project Cost - Resistance & Portsmouth Area**<br>Direct comparison of all project solution option costs witin the Portsmouth Area to resolve Resistance and System Planning design violations. | 8 | $32M | $25.2M | $50.6M | $33.7M | |
| | Rating: | 3 | 5 | 0 | 3 | *Rating Calculated.* |
| **Distribution Budget Impact (Resistance & Portsmouth Area)**<br>Direct comparison of all project solution option costs (distribution) witin the Portsmouth Area to resolve Resistance and System Planning design violations. | 10 | $12.4M | $10.6M | $25M | $15.4M | |
| | Rating: | 4 | 5 | 0 | 3 | *Rating Calculated.* |
| | **Total** | **430** | **449** | **354** | **427** | |
| | **Rank** | **2** | **1** | **4** | **3** | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

**Substation Constructability Review**

| | | |
|---|---|---|
| **Project Title:** Laconia Reliability Study | ☐ | Prior Constructability Review Performed? |
| | ☒ | Program Related Site Specific Review? |
| **Project Numbers(s):** A21N63 | **Project Constructability Phase:** | |
| **Date(s) of Constructability Review:** **06/15/2022** | ☒ Conceptual Engineering Design | |
| Click to enter a date | ☐ Preliminary Engineering Design | |
| | ☐ Detailed Engineering Design | |
| **Project Scope Statement: Laconia Study Alternative #1 – Permanent switching, series bus tie breakers and SCADA device** | | |

**Department Review/Walkdown Attendees*:**

| Required [X] | Attended [X] | Department | Name | Required [X] | Attended [X] | Department | Name |
|---|---|---|---|---|---|---|---|
| ☐ | ☒ | Project Management | Walter Quinn | ☐ | ☒ | S/S Engineering | D. Anelay/ A. Drammeh/M. Cosgro |
| ☐ | ☐ | Asset Management | | ☐ | ☒ | P&C Engineering | R. Matos |
| ☐ | ☐ | Constr. Management | | ☐ | ☐ | Civil Engineering | Joseph Sperry |
| ☐ | ☐ | S/S Technical / LCE | | ☐ | ☐ | Telecom | |
| ☐ | ☒ | S/S Operations** | Ben Briggs | ☐ | ☐ | Environmental | |
| ☐ | ☐ | Field Engineering | | ☐ | ☐ | Real Estate | |
| ☐ | ☐ | Line Engineering | | ☐ | ☐ | ROW T&D Rights & Survey | |
| ☐ | ☐ | Vegetation Management | | ☐ | ☐ | Survey Engineering | |
| ☐ | ☐ | Siting | | ☐ | ☐ | Cost Estimating | |
| ☐ | ☐ | Safety | | ☐ | ☐ | Project Services (Outreach) | |
| ☐ | ☐ | SCADA | | ☐ | ☐ | Material Procurement | |

*** Sign-off in the table above for the Detailed Engineering Design Constructability Review indicates that all Action Items/Concerns from prior Constructability Reviews have been mitigated/resolved as documented in this form. Not every department is required to attend walkdowns for every project but should be consulted for project impact considerations**

** Internal Eversource Substation Operations must be included in the review even if external construction resources are planned

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Constructability Review Form: **M6-PM-2012 - Eversource**

**Substation Constructability Review**

***[Project Manager]*** certifies that this review was performed to completeness, that all applicable departments were informed of the project and have had opportunity to provide input to this review:

Walter Quinn/Walter Quinn 17 August 2022

*Name / Signature* *Date*

| Documents available for use prior to Constructability Review | | | | | |
|---|---|---|---|---|---|
| **[X]** | **Document** | **[X]** | **Document** | **[X]** | **Document** |
| ☒ | Initial Scope<br>-Birdseye site plan<br>-General Arrangement | ☐ | Preliminary Drawings<br>-Civil Site Drawing<br>-Electrical Drawing<br>-Section Drawings | ☐ | Prints in hand for marking up<br>-Panel Front/Read View<br>-Control Enclosure Layout<br>-Floor / Wall Plans |
| ☐ | Detailed Scope Document | ☐ | Proposed Schedule | ☐ | Construction Sequence/Timeline |
| ☐ | Previous Notes / Comments / Observations | ☐ | Major Material / Equipment List | ☐ | Replace / Reuse of equipment |

**Action Items and Resolutions:**

| Item No. | Const. Review Action Item/Concern | Design Resolution/Mitigation: |
|---|---|---|
| 1 | **Concern if there's enough space to fit both circuit breakers and disconnect switches with existing configuration.** | **It was confirmed that there's enough space by moving existing cap bank to another location to make space for the new circuit breakers.** |
| 2 | **Existing substation uses the station service transformers for station service and relay potential.** | **It was decided that new voltage transformers should be installed to provide potential to the relays.** |
| 3 | **Is there room for the cap bank to move in the current fence line? When moving the cap bank will we require 2 one per bus?** | **Yes, there are space to accommodate the cap banks as shown one the conceptual design – one cap bank to each bus.** |
| 4 | **With a permanent switching will we still have issues with limited transformation in the area (possibly need to add at transformer in Ashland)** | Yes, issues will still exist in the greater area despite the load transfer addressing Laconia. The Ashland Reliability Study is reviewing these constraints at the regional-level and will include the Laconia Alt.2 as a solution option as its Alt.3 solution. |
| 5 | | |

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| A | **Engineering & Asset Management** | | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**
**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 1 | **Scope of Work**<br>- Is scope adequately developed and sufficiently detailed for intended deliverable?<br>- Any complimentary projects or other adjacent obsolete equipment for inclusion?<br>- Any overlapping projects that could impact work/outages?<br>- Consider Physical Installation, P&C Scope, Civil Scope, Engineering studies, Design standard adherence<br>- Any remote station impacts?<br>- Engineering Estimates for Design and Technical Support? (EE and EOC) Total Project | ☐ | Current station service transformers have dual function, station service and bus potential. Adding additional PTs to separate the functions.<br>- There are no overlapping projects at Laconia. No remote end work needed. |
| 2 | **Materials Identified/Ordered**<br>-Any concerns with BOM/Major Materials? Review BOM lead times and project need dates<br>-Specialty Major Materials: Identify Specialty Equipment & Materials potentials - temporary/replacement - long lead items?<br>-Any Materials needed to facilitate construction access? | ☐ | No concerns with ordering materials at this time. If needed Eversource will procure items with long lead time, construction contractor will procure all other misc. materials. |
| 3 | **Control House** - Review Unmapped equipment interferences, Control/Battery Enclosure Layout, HVAC System (if equipment added), space for new or modified equipment, AC / DC station breaker availability and service loading, Panel Space, Expansion, one-line and/or riser type panelboard drawings, other.. | ☐ | Is there room for the new cabinets to support the 3 bus differential zones |
| 4 | **Ratings & Dimensions** for Major Equipment. Any concerns upon field review? Equipment Rating One Line (and/or equipment thermal ratings tables) - Review for any errors in field | ☐ | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**
**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 5 | **Wall, Fence, Gate, and Foundation Considerations**<br>-Any permanent / temporary alterations or relocations required?<br>-Pre-Project Sound Measurements Needed? Sound Walls?<br>-Take measurements for Foundation quantities, dimensions and concrete volumes<br>-CIP Review/Ballistic needs. Any Physical Security Requirement Consideration?<br>-Assess condition of existing yard equipment foundations and viability for reuse (if proposed)<br>-Review station expansion areas (if needed) for structures, old foundations, etc.<br>-Any Steel Structural Plan Considerations?<br>-Any impacts to construction plan? | ☐ | No impacts to existing fenceline |
| 6 | **Below Grade / Enclosure Raceway** - If possible, evaluate existing raceway and review spacing requirements. Review for any subsurface investigation needs or potential below grade obstructions. GPR/test pits needed? Geotechnical Investigation - is soil boring or resistivity investigation needed? | ☐ | There is an existing cable trench running through the 34.5kV bus. It will need to be avoided or supported during construction to allow installation of new foundations and equipment |
| 7 | **Underground Obstructions**<br>-Drawing review concerns?<br>-Is preconstruction or test excavation needed?<br>-Is reuse of underground control cables / Conduits /replace Non-Shielded Cable feasible (if applicable)<br>-Are spare conduits available? Are they useable?<br>-Review if any areas will need to be plated for increased load bearing for equipment access (i.e., large Xfmr, etc.) | ☐ | |
| 8 | **Grounding Plan (Ground Grid)** - Will footprint impact layout or other equipment? Identify locations to improve grounding. Impacts to foundations and ground grid plans. Observations on wetlands or ability to perform tests | ☐ | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 9 | Nomenclature / Switching One-Line Diagram<br>-Any obvious deviations from diagrams provided? | ☐ | No |
| 10 | BPS Separation Requirements<br>- Is this BPS Substation? Y/N (part of PAF)<br>- Changes to pre-existing BPS standards? | ☐ | Laconia is not a BPS station. |
| 11 | IEC 61850 Substation Automation and Communication Requirements - Any Impacts/Retrofit needed? | ☐ | Laconia is not an IEC 61850 station. |
| 12 | Any Upgrades to ES Standards - Is retrofit needed to bring up to ES standards? Can that be done? | ☐ | No |
| B | **Construction** | | |
| 1 | **Any safety hazards specific to the facility? i.e., Low Bus, Deterioration, etc.** | ☐ | |
| 2 | **Prior known Site Specific Conditions**<br>-Common or Obvious station Issues<br>-Missing scope items that could impact costs? | ☐ | • There is a concern of oil contamination under one transformer that we do testing on annually.<br>• We often respond to these two transformers on site causing circulating current and one of the transformers gets out of band. |
| 3 | **Identify/Consider Required Depts for Construction?**<br>-Who is constructor: Internal vs External Resources<br>-S/S Ops, GO, Test, Field Engineering, etc.<br>-Specialty Contractors Required?<br>-Required Oversite Needed – Estimated level of CR and LCE support needed | ☐ | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**
**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 4 | **Site Plan, Access, and Temporary Construction Facilities:**<br>-Confirm maintenance access for proposed new or replaced equipment<br>-Verify clear footprint for yard equipment / Property Plan<br>-General access to site, can areas outside substation be utilized?<br>-Substation Entry Plan (driveway and drive path modifications)<br>- Identification of Unique Requirements, i.e. (access bridges, station service, etc.)<br>-Site Development Plan (grading and drainage) with Cut/Fill<br>-Existing Rock Conditions? Potential Impacts (rock quantity)?<br>-Any police details needed for deliveries, restricted hours, and/or need for extended hour approvals<br>-Any Sanitary Civil Requirements? (Septic tanks, etc.)<br>-Review turning radius for delivery trucks (if critical)<br>-Any Substation Access and site/yard access Limitations?<br>-Office Trailer Needs: Facilities, Utilities, Restroom, Container, Dumpster Space<br>-Weather impacts to Site (Snow Placement)<br>-Identify Material Laydown and Security<br>-Where will new vs removed equipment go?<br>-Construction permit for trailers outside substation fence? | ☐ | • Want to keep in mind a mobile may be required in a couple configurations during the outage sequence. May need to make special connections provisions that don't currently exist. |
| 5 | Unique Equipment Considerations:<br>Gas insulated substation, Gas insulated line, Gas insulated bus, Pass Breaker, Statcom, Sync Condenser | | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 6 | **Outage & Energization Plan and Construction Sequence:** *Review electrical working clearances for equipment during construction, Detailed look at protection zone changes, Locked sequence or random outages, Outage durations minimized.* ***Considerations:***<br>-Approach Distances – Outage Requirements to maintain electrical clearances throughout proposed installation<br>-Distribution Clearances<br>-Clearance Holder Assignments<br>-Drawings vs Field Conditions<br>-Outage boundaries and interconnections<br>-Phased approach needs for additional mobilizations<br>-Verify outage sequence supports the planned construction sequence and timeline. (Lead Commissioning Engineer "LCE", Substation Operations, and Outage Planner input)<br>-Any design alterations or considerations to Eliminate SCLL Conditions, Reduce Recall Time, Reduce Outage durations, Special Conditions<br>-Additional outage requirements: Railroad Catenaries, Fiber outage, SCADA outage, Relay permissions<br>-Seasonal or weather conditions impacts | ☐ | Need to install mobile transformer need t be looked into |
| 7 | **Equipment Testing & Acceptance**<br>-Grounding plans / Resources? Will we need grounds hung?<br>-Hi-pot testing and where will the equipment be set up? | ☐ | |
| 8 | Need for mobile generator and where connected (if needed) | ☐ | |
| 9 | Need for mobile battery and where connected (if needed) | ☐ | |
| 10 | OT work required or Notable Permit Conditions (special hours)? | ☐ | If fence needs to be expanded for Cap bank installs |
| 11 | Coordination of boundaries/seams (Identification of point of demarcation for connection to existing equipment and/or for coordination with other municipalities) | ☐ | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**
**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| C | **Environmental** | | |
| 1 | Soil Pre-Characterization or Grab Sampling Completed/Planned | ☐ | NA |
| 2 | **Desktop investigation and EAD Review**<br>-Required Permits<br>-Stormwater Considerations<br>-Dewatering requirements<br>-Wetland and buffer review | ☐ | NA |
| 3 | Risk or presence of PCB's/Asbestos/Lead/SF6 | ☐ | Existing control panel and possibly in soil |
| 4 | Transformer Spill Containment Recommended? | ☐ | Not part of alternative 1 |
| 5 | Expanding Footprint / New Buildings or future Expansion Plans? (Enviro Impact) | ☐ | NA |
| 6 | Environmental oversight considerations? (Inspection type/Interval) | ☐ | Typical BMPs all work within the fenceline |
| 7 | Environmental mitigations - Any matting or seasonal needs? Review D&M Plan with CR. | ☐ | Typical BMPs all work within the fenceline |
| D | **Siting, Project Services, and ROW T&D Rights & Survey** | | |
| 1 | **Any regulatory concerns or approvals needed?**<br>- Any concerns noted that could be mitigated by scope/design alterations?<br>- Likely to require visual screening? What considerations (feasibility or location)?<br>-Zoning Relief and Permits required? | ☐ | Not anticipated |
| 2 | Other siting considerations? | ☐ | NA |
| 3 | **Neighbor/Abutter impacts:**<br>- Any noise, visual impacts, or sensitive abutters<br>- Any changes to lighting or additional lighting needed? | ☐ | This is off a neighborhood but is a little ways away from the last house. May impact work hours and weekend work. |
| 4 | Review for roadway, gate access, trailers, equip height, noise, weekend/night work, or any potential public disturbance related to work | ☐ | The substation requires access through a neighborhood. Work hours will be strictly enforced by the town. The public access road has been in poor condition and is posted in the spring for heavy loads. |
| 5 | Installation within Eversource Rights - Is Rights and Restrictions Review required? | ☐ | NA |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 6 | Expanding Footprint / New Buildings / Fence line or future Expansion Plans? | ☐ | Possibly due to cap bank relocation |
| 7 | Proposed Equipment on same property? - Any Encroachments | ☐ | |
| F | **Protection & Controls** | | |
| 1 | Panel Graphic additions and/or Modifications | ☐ | Four new panels will be needed to house the new relays. |
| 2 | Space on existing panels for new equipment? (front & rear of panel fronts) | ☐ | New panels will be used for new equipment. |
| 3 | Panel fronts conform to drawings | ☐ | Yes |
| 4 | Access to bring new panels into control enclosure | ☐ | No concern |
| 5 | Nameplate list and location of nameplates | ☐ | No concern |
| 6 | Verifies that relays and meters that will be an interconnected project work are as shown on the drawings. | ☐ | No other projects |
| 7 | Temporary protection, relays, control cable needed? How long will they be required? | ☐ | A mobile might be needed during construction. |
| 8 | Will relay setting changes be needed? Any additional outage requirements for changes? | | All new relays will require new relay settings. |
| G | **Telecom Engineering** | | |
| 1 | Review telecom equipment in existing control enclosure | ☐ | |
| 2 | Review path to get telecom circuits into the station and paths within the control house. Determine whether new underground duct or overhead tray work is needed. | ☐ | |
| 3 | Review current or proposed Telecom equipment power connections and validate with P&C any need for system 1 and system 2 separation. | ☐ | |
| 4 | Review current Telecom fiber diversity and validate with P&C any fiber diversity requirements. | ☐ | |
| 5 | Review and list any remote station impacts/updates | ☐ | |
| 6 | Confirm whether correct interface equipment is available (i.e.) for fiber termination or multiplexor termination | ☐ | |

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**
**Substation Constructability Review**

| | Key Review Item Description | N/A or No Concern | Review Notes, Concerns, or Additional Info Needed |
|---|---|---|---|
| 7 | Confirm whether existing communications cabinets are enough to support additional telecommunications equipment installed | ☐ | |
| 8 | Review space for any required additional communications cabinets which may be required to support additional telecommunications equipment installed | ☐ | |
| 9 | Review third party Telecommunications at substation and confirm whether additional capacity or Ground Potential Rise protection is required | ☐ | |

**Photos**

(Ex. Equipment control cabinet, Breakers, MODs, CCVTs, PTs, Transformers)

**PROJECT REVIEW SHEET** **ENVIRONMENTAL AFFAIRS DEPARTMENT**

| | | |
|---|---|---|
| Project Name: | | Project Start Date: |
| Project Location: | | Project Number: |
| | | EAD Contact: |
| Revision: | Date: | Env Cost Estimate: |
| Project Description: | | |

| | Environmental Issues | YES | NO | UNK | Comments |
|---|---|---|---|---|---|
| PERMIT | USACE (Sect. 10 / 404) | | | | |
| | EPA SWPPP (NOI) | | | | |
| | NH Site Evaluation Committee | | | | |
| | NHDES Wetlands Dredge & Fill | | | | |
| | NHDES Statutory Permit by Notification (SPN) | | | | |
| | Endangered Species Review (NHB/NHF&G) | | | | |
| | NHDES 401 WQC | | | | |
| | NHDES Shoreland | | | | |
| | NHDES Alteration of Terrain | | | | |
| | NHDHR/Sect 106 | | | | |
| | NHPUC | | | | |
| | NHDOT | | | | |
| | MUNICIPAL (Site Plan Review, Conditional Use, Special Exemption, Waivers, etc.) | | | | |
| | Building/Demo Permit | | | | |
| | FAA | | | | |
| | Notice of Intent to Cut | | | | |
| | NPDES/Dewatering | | | | |
| | Other | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| HAZMAT / ETC. | State/Federal Listed Waste Site | | | | |
| | Soil Sampling/Disposal | | | | |
| | PCB Sampling/Disposal | | | | |
| | Asbestos Inspection/Sampling | | | | |
| | SPCC | | | | |
| | Oil Transfer / Storage | | | | |
| | Other | | | | |