Eversource Energy - Climate Change 2019

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Eversource Energy (NYSE: ES) operates New England's largest energy delivery system, delivering reliable energy and superior customer service to approximately 4 million electric, natural gas and water customers in Connecticut, Massachusetts and New Hampshire. We are committed to safety, reliability, environmental stewardship and expanding energy options for our region. Sustainability is an integral part of Eversource's operations and strategy. Eversource is a public utility holding company. Its utility subsidiaries are The Connecticut Light and Power Company (CL&P), NSTAR Electric Company (NSTAR Electric), Public Service Company of New Hampshire (PSNH), NSTAR Gas Company (NSTAR Gas), Yankee Gas Company (Yankee Gas) and Aquarion Water Company (Aquarion). Eversource is engaged primarily in the energy delivery business. The Company's electric utilities are primarily involved in the transmission and distribution of electricity and serve industrial, commercial and residential customers. Our natural gas subsidiaries also serve industrial, commercial and residential customers. Aquarion Water serves residential, commercial, industrial and fire protection customers.

As a centerpiece of our environmental commitment, we are dedicating ourselves to an ambitious but attainable target to be carbon neutral and help our customers and our region reduce their carbon footprint. As referenced in C4.3a we began investigating this target in 2018; it was approved, and we began implementation in 2019. Further details will be forthcoming in our 2020 CDP filing.

As stated in our Commitment to Environmental Sustainability and Carbon Neutrality (see attachment in 12.4), "Eversource aims to be carbon neutral by 2030, and the benefits of our regional clean energy initiatives will more than offset Eversource's greenhouse gas emissions."

We are targeting these steps to help us attain our long-term emissions reduction goals:

· Reduce our own energy use by improving the efficiency of our facilities and reducing fleet emissions.

· Reduce line losses in the electric transmission and distribution system.

· Reduce sulfur hexafluoride in our electrical gas-insulated switchgear.

· Replace remaining bare steel and cast-iron mains in our natural gas distribution system to improve safety and eliminate methane leaks.

To keep our system strong and reliable in the face of climate change, we are pursuing the following actions:

· Continue to make infrastructure investments that improve our system resiliency in response to climate change, including vegetation management, wire hardening and pole strengthening.

· Implement a grid modernization plan that will upgrade our electric distribution infrastructure, continue to deploy smart technology to automate the system, and facilitate integration of distributed energy resources, such as solar generation.

· Improve the efficiency of our electric and gas distribution systems and continue to provide customers with ways to minimize their energy use and access clean energy solutions.

As New England's largest utility and dedicated environmental steward, we are committed to bringing more clean and affordable

energy to the region. Here are some of the ways in which we will contribute to reducing New England's greenhouse gas emissions:

· Partner with Ørsted, the largest and most successful operator of offshore wind facilities in the world, to develop up to 4,000 MW of wind generation off the coast of New England, reducing regional carbon dioxide emissions by millions of tons per year as fossil-fired generation is displaced.

· Maintain our #1 utility ranking in the nation for energy efficiency programs, saving our electric customers approximately 1 billion kilowatt hours per year and gas customers over 10 million therms per year. This equates to over $215 million our customers save annually.

· Foster solar development opportunities, including operation of the existing 22 Eversource facilities totaling 70 MW of solar capacity, which provide an emissions reduction benefit equal to taking 7,600 cars off the road each year.

· Develop innovative battery storage projects that reduce the need for fossil fuel-powered generation while improving power quality and reliability.

· Expand electric vehicle infrastructure, starting with the installation of approximately 3,500 charging ports in Massachusetts by the end of 2020.

· Provide our customers with the benefits of emissions-free renewable power, such as wind, solar and hydropower, through energy supply contracts we enter into on their behalf.

In January 2018, PSNH completed the sale of its thermal generation assets, consisting of approximately 1,100 MW of coal, natural gas, biomass and oil-fired electricity generation facilities in New Hampshire. Since that transaction closed in January 2018, no Eversource company has owned any fossil generation. In August 2018, PSNH completed the sale of its hydroelectric generation assets.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2018	December 31 2018	No	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board Chair	Eversource's Chairman, President and Chief Executive Officer has overall responsibility for climate change matters impacting the Company. The Board of Trustees' Finance Committee reviews Eversource's Enterprise Risk Management Program, which includes practices to monitor and mitigate risk exposures. Additionally, senior level managers and officers lead Eversource's efforts to address climate change-related impacts on Company operations. Our CEO also approved our target to be carbon neutral by 2030, as stated in our 2018 Sustainability Report and Commitment to Environmental Sustainability and Carbon Neutrality.
Chief Financial Officer (CFO)	The Vice President of Supply Chain, Environmental Affairs and Property Management, who reports to the Executive Vice President and Chief Financial Officer, has responsibility for environmental compliance and performance. That includes developing environmental strategy, setting targets to improve environmental performance and strengthening relationships with stakeholders. This has led to the development of our Commitment to Environmental Sustainability and Carbon Neutrality, which addresses steps we are taking to minimize and mitigate the impacts of climate change.
Chief Financial Officer (CFO)	The Director of Enterprise Risk Management reports to the Chief Financial Officer and has responsibility for the Enterprise Risk Management Program which identifies, assesses, monitors and reports on the enterprise and business level risks to the Company. The Chief Financial Officer is also the Chairman of the Eversource Risk Committee.
Chief Operating Officer (COO)	Officers reporting to the Executive Vice President and Chief Operating Officer have responsibility for the reliability and resiliency of our electric and natural gas operations, North American Electric Reliability Corporation (NERC) compliance, and Class 2 leaks outstanding.
Other, please specify (Executive Vice President, Enterprise Strategy and Business Development)	Officers reporting to Executive Vice President, Enterprise Energy Strategy and Business Development, have responsibility for energy policy and initiatives that impact climate change, such as natural gas expansion strategy, electric and natural gas vehicle initiatives, grid modernization, the development of additional solar facilities in Massachusetts and our expanded partnership with Ørsted on offshore wind projects.
Other, please specify (Executive Vice President and General Counsel)	Officers reporting to the Executive Vice President and General Counsel have responsibility for zero and low-emission renewable energy credit (ZREC and LREC) programs, renewable energy procurement, compliance with state energy bills, for the percentage of environmental audits completed, for helping to support compliance with environmental laws and sustainability initiatives, and for helping to ensure that all of our efforts supporting climate change matters are performed in accordance with federal, state and local laws and regulations.
Other, please specify (Executive Vice President, Customer and Corporate Relations)	Officers reporting to the Executive Vice President, Customer and Corporate Relations, have responsibility for energy efficiency initiatives, and monitors and responds to state and federal climate and energy-related legislation.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Other, please specify (Annually)	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Our Board of Trustees oversees our commitment to provide safe and reliable electric, natural gas and water services to our customers. On pages 13-16 of our 2018 Annual Report (see C12.4), we identify climate change related risk factors, including impacts from severe weather and those associated with water availability and quality. Our Board also oversees assessment of long-term climate change risks and opportunities and strategic initiatives to bring clean energy to the region, lower our emissions, strengthen our infrastructure and enable emerging technologies. Board oversight of performance metrics includes reliability and restoration performance, gas emergency response, safety and energy efficiency targets, and in 2019, an ESG performance metric. Per our 2019 Proxy Statement (see C12.4), our Board held 7 meetings in 2018, and with Committees held a total of 24 meetings. Our Board and its Committees oversee risk management processes and programs. All Board Committee Chairs report to the Board following each Committee meeting to discuss risk related issues, assess their implications and provide oversight on appropriate actions. The Board oversees comprehensive operating and strategic planning, including long-term objectives, specific strategies to achieve those goals, and plans to implement each strategy. The operating plan, consisting of goals and objectives for the year, key performance indicators and financial forecasts, was reviewed and approved by the Board in Feb. 2018. Our Enterprise Risk Management program is overseen by the Board's Finance Committee. Management identifies and analyzes known and emerging risks, including those related to climate change, to determine materiality, likelihood and impact, and develops mitigation strategies. The findings are discussed with the Finance Committee and full Board, including reporting on an individual risk-by-risk basis on how issues are being measured and managed. At the Board's 7 meetings in 2018, it reviewed and discussed performance reports, Company plans and prospects, and any immediate issues. Examples of strategic initiatives related to climate change include: • Our partnership with Ørsted on offshore wind projects. • Construction of 22 solar generation facilities totaling 70 MW of capacity in MA, estimated to save nearly 36,000 MT of carbon per year. •$2.83B invested in our core businesses in 2018, resulting in electric customers experiencing service interruptions on average only about once every 1.5 years, placing us in the top quartile among our peers. Also, we are increasing the rate of gas pipeline replacements, improving system safety and environmental performance. • Grid modernization and engineering advances, including electric vehicle infrastructure and energy storage systems. • Electric and natural gas distribution system improvements that provide customers with ways to manage their energy use. Also, our Board receives an annual presentation on our sustainability efforts.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Board's Finance Committee is responsible for overseeing our Enterprise Risk Management (ERM) program, which is led by our CFO in his position as Chair of our Risk Committee, which reports to the Finance Committee on climate related risks and opportunities. Our ERM program involves the application of a well-defined enterprise-wide methodology designed to allow our executives to identify, prioritize, categorize, and mitigate the principal risks to the Company. It is integrated with other assurance functions throughout the Company to ensure appropriate coverage of risks that could impact the Company. In addition to known risks, the program identifies emerging risks, through participation in industry groups, discussions with management, and in consultation with outside advisers. Our management then analyzes the risks to determine materiality, likelihood and develops mitigation strategies. Management broadly considers our business model, the utility industry, the global economy and the current environment to identify risks. The findings of this process are discussed with the Finance Committee, which provides a detailed report of all of its meetings with the full Board, including reporting on an individual risk-by-risk basis on how these issues are being measured and managed. The ERM program was recognized as a mature program for the second year in a row by the Risk Management Society.

Eversource's Sustainability Steering Committee includes the Vice President of Supply Chain, Environmental Affairs and Property Management, the Senior Vice President of Regulatory Affairs and Chief Communications Officer, the Senior Vice President of Engineering, the Vice President of Investor Relations, the Vice President of Energy Strategy and Policy, and Aquarion Vice President of Water Quality, Environmental Management & Government Relations. The Committee meets at least every two months to develop and review progress on sustainability strategy, our actions to address climate change, and goals and targets, including our target to be carbon neutral by 2030 as outlined in our "Commitment to Environmental Sustainability and Carbon Neutrality." Our Steering Committee also provides direction and receives updates on initiatives related to stakeholder engagement, supply chain sustainability and communication of our sustainability efforts. These initiatives related to climate change include working with internal and external stakeholders to identify and implement lower carbon opportunities in our operations and supply chain, supplier reporting on emissions, and transparency around our efforts in developing our annual online corporate sustainability report and active participation in such projects as Edison Electric Institute's (EEI) and the American Gas Association's (AGA) initiative to standardize reporting through its Environmental, Social, Governance (ESG) Sustainability template.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Who is entitled to benefit from these incentives?

Corporate executive team

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

In 2018, we significantly advanced our long-term strategy of being a clean energy leader. Our Board determined this goal to have attained a 150% performance within financial performance goals for the 2018 annual incentive program for named Executive Officers. Elements that contributed to the success of this goal included: • Expanded our offshore wind energy partnership with Orsted, the global leader in offshore wind development. The partnership includes two projects that have contract commitments of 830 MW, along with a 257 square mile lease tract off the New England coast; • Completed construction of 62 MW of large scale solar in Massachusetts in 2018; • Made solid progress on grid modernization projects, including battery storage and electric vehicle infrastructure.

Who is entitled to benefit from these incentives?

Facilities manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction project

Comment
Identify, assess and implement cost-effective energy savings and other GHG emissions reduction or avoidance opportunities at each of Eversource's facilities, and work collaboratively to implement equipment and/or process changes to attain savings.

Who is entitled to benefit from these incentives?
Public affairs manager

Types of incentives
Monetary reward

Activity incentivized
Behavior change related indicator

Comment
Promote awareness of Eversource's environmental leadership, stewardship and sustainable business practices such as energy efficiency and other GHG mitigation measures for both customers and employees through outreach ("Today" daily employee newsletter), internal performance posters and eBilling. Implemented an ongoing communications strategy around communicating Eversource's "Commitment to Environmental Sustainability" statement to employees and other stakeholders.

Who is entitled to benefit from these incentives?
Energy manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction project

Comment
Issue Requests for Proposals for long-term renewable energy contracts under state-approved regulations. Evaluate bids received, negotiate contracts and file for approval with state regulators.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction project

Comment
Various employees involved in the planning and construction of solar generation in Massachusetts are eligible for incentive payments. 58 MW of solar power facilities on sites in Massachusetts were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. We estimate our investment in these new facilities will be approximately $170 million.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Eversource offers a wide variety of energy efficiency programs to its customers and administers these programs to help customers reduce energy consumption (electricity and natural gas) which results in reduced emissions. Where applicable, participating

Eversource customers may also enjoy the benefit of savings from the installation of "fuel neutral" weatherization and insulation measures. These measures help reduce the use of other home heating fuels such as oil, natural gas, liquid propane, kerosene and wood, and result in additional emissions reductions. Certain management employees within Eversource's Energy Efficiency group receive incentive payments based on attaining specific energy savings goals.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Eversource's electric utility companies purchase wholesale power for distribution and must manage procurement to meet Connecticut, Massachusetts and New Hampshire state Renewable Portfolio Standards (RPS). Employees within the wholesale power organization receive incentive payments based on performance.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction project

Comment
All Eversource management employees are eligible to receive incentive payments based on performance. Performance goals for certain employees may include environmental targets, support for emerging and existing environmental laws, regulations and policy (including climate-change related); stewardship and sustainable business practices such as energy efficiency, and other GHG mitigation measures; and supporting strategic initiatives related to energy efficiency, renewable energy (large-scale solar and offshore wind), distributed generation, grid modernization, electric vehicle infrastructure, energy storage, natural gas expansion and natural gas vehicles. These initiatives will lead to emissions reductions.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	3	The Board of Trustees oversees the Company's comprehensive operating and strategic planning. The operating plan, which is reviewed and formally approved by the Board in February following review by the Finance Committee, consists of goals and objectives for the year, key performance indicators, and financial forecasts.
Medium-term	3	10	The Board of Trustees oversees the Company's comprehensive operating and strategic planning. The strategic planning process consists of long-term corporate objectives, specific strategies to achieve those goals, and plans designed to implement each strategy.
Long-term	10	20	The Board of Trustees oversees the Company's comprehensive operating and strategic planning. The strategic planning process consists of long-term corporate objectives, specific strategies to achieve those goals, and plans designed to implement each strategy.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	We have an Enterprise Risk Management (ERM) program for identifying principal risks of the Company including climate-related risks. Additional information is provided in C2.2b below.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Our Enterprise Risk Management (ERM) program involves the application of a well-defined enterprise-wide methodology designed to allow our executives to identify, assess, categorize, prioritize and mitigate the principal risks of the Company. It is integrated with other assurance functions throughout the Company to ensure appropriate coverage of risks that could have substantive financial impact to the Company. In addition to known risks, the program identifies emerging risks, through participation in industry groups, discussions with management, and in consultation with outside advisers. Our management then analyzes the risks to determine materiality, likelihood and impact, and develops mitigation strategies. Management broadly considers our business model, the utility industry, the global economy, climate change and the current environment to identify risks.

Risks identified during the ERM process have formal, actionable, measurable mitigation plans, are monitored on a regular basis, and are reported to the Risk Committee and Executive management quarterly and semi-annually, respectively. In addition to the regularly scheduled reports by ERM of all of the company's enterprise-wide risks and the results of the ERM program, management reports periodically to both the Audit and Finance Committees in depth on specific top enterprise risks at the Company, including reporting on how these issues are being measured and managed. ERM also reports regularly to the Finance Committee on the activities of the Company's Risk Committee, which consists of senior officers and is responsible for ensuring that the Company is managing its principal enterprise-wide risks, as well as other key risk areas such as operations, environmental, information technology, compliance and business continuity.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The Environmental Protection Agency mandated greenhouse gas emission reporting beginning in 2011 for emissions for certain aspects of our business including stationary combustion, volume of gas supplied to large customers and fugitive emissions of SF6 gas and methane. Monetary and operating impacts of climate related regulations are part of our risk assessments.
Emerging regulation	Relevant, always included	We are continually evaluating the regulatory risks and regulatory uncertainty presented by climate change concerns. Such concerns could potentially lead to additional rules and regulations that impact how we operate our general utility business. These could include federal "cap and trade" laws, carbon taxes, and fuel and energy taxes. We analyze costs of these potential regulations as part of our risks assessment and expect that any costs of these rules and regulations would be recovered from customers.
Technology	Relevant, always included	Eversource regularly assesses climate risks to our system and performs upgrades to bring new construction or retrofit construction to our enhanced design criteria, meeting or exceeding technology requirements of the National Electrical Safety Code. Investments typically target upgrades that will improve the ability of the system to withstand the impacts of wind, lightning, snow, ice and animals. One example of a system investment is the Seafood Way Substation on the South Boston waterfront. Eversource constructed the substation to meet the growing demand for power on the waterfront, and to support energy needs in the Greater Boston region. The substation is built on a platform 15 feet above street level on pilings that are sunk some 80 feet below ground. The substation is built at this height to withstand increasingly intense storms and tidal surges.
Legal	Relevant, always included	Eversource, including various subsidiaries, is involved in legal, tax and regulatory proceedings regarding matters arising in the ordinary course of business, which involve management's assessment to determine the probability of whether a climate related loss will occur and, if probable, its best estimate of probable loss. For example, the evaluation of cost and liability coverage through property insurance resulting from increased climate related storm severity.
Market	Relevant, always included	Eversource continually assesses risks to ensure we meet energy demand, which varies with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling represent their largest energy use. For water customers, conservation measures imposed by the communities we serve could impact water usage. 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.
Reputation	Relevant, always included	Eversource is continually assessing risks and opportunities associated with climate change and meeting stakeholder expectations that could impact our reputation. Increasingly our customers and regional leaders are seeking initiatives that lower carbon emissions in the region. We are working extensively with state and industry leaders to bring offshore wind to our region through our partnership with Orsted to advance clean energy in our region to meet customer expectations around climate change. The effects of climate change, including severe storms, could cause significant damage to our facilities and may cause outages and property damage, which may require us to incur additional costs that may not be recoverable from customers and damage our reputation with customers and the communities we serve. Additionally, the potential disruption of our operations due to storms, natural disasters or other catastrophic events could be substantial, particularly as regulators and customers demand better and quicker response times to outages. Our ongoing resiliency plans, including pole replacements and vegetation management work to continually address this risk.
Acute physical	Relevant, always included	Eversource continually assesses acute physical risks due to climate change, including from severe storms that could cause significant damage to our facilities, and may cause outages and property damage, which may require us to incur additional costs that may not be recoverable from customers and damage our reputation with customers and the communities we serve. Additionally, the potential disruption of our operations due to storms, natural disasters or other catastrophic events could be substantial, particularly as regulators and customers demand better and quicker response times to outages. Our ongoing resiliency plans, including pole replacements and vegetation management work to continually address this risk.
Chronic physical	Relevant, always included	Chronic physical risks from climate change may include an increase in sea levels and changes in weather conditions, such as changes in precipitation and extreme weather events including drought. Customers' energy needs vary with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling represent their largest energy use. For water customers, conservation measures imposed by the communities we serve could impact water usage. 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. Eversource regularly assesses climate risks to our system and performs upgrades to bring new construction or retrofit construction to our enhanced design criteria, meeting or exceeding technology requirements of the National Electrical Safety Code. Investments typically target upgrades that will improve the ability of the system to withstand the impacts of wind, lightning, snow, ice and animals. One example of a system investment is the Seafood Way Substation on the South Boston waterfront. Eversource constructed the substation to meet the growing demand for power on the waterfront, and to support energy needs in the Greater Boston region. The substation is built on a platform 15 feet above street level on pilings that are sunk some 80 feet below ground. The substation is built at this height to withstand increasingly intense storms and tidal surges.
Upstream	Relevant, always included	Eversource is continually assessing risks and opportunities associated with climate change and meeting stakeholder expectations that could impact our reputation. Increasingly our customers and regional leaders are seeking initiatives that lower carbon emissions in the region. We are working extensively with state and industry leaders to bring offshore wind to our region through our partnership with Orsted to advance clean energy in our region to meet customer expectations around climate change.
Downstream	Relevant, always included	Eversource continually assesses risks to ensure we meet energy demand, which varies with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling represent their largest energy use. For water customers, conservation measures imposed by the communities we serve could impact water usage. 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.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Eversource's management analyzes risks to determine materiality, likelihood and impact, and develops mitigation strategies. Management broadly considers our business model, the utility industry, the global economy and the current environment to identify risks. The findings of this process are 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. These include consideration of risks to our entire company such as the impact a severe storm will have on our reputation and financial implications. In addition to the regularly scheduled reports by Enterprise Risk Management (ERM) of all of the Company's enterprise-wide risks and the results of the ERM Program, management reports periodically to the Finance Committee in depth on specific top enterprise risks at the Company. ERM also reports regularly to the Finance Committee on the activities of the Company's Risk Committee. The Risk Committee, chaired by the Executive Vice President and Chief Financial Officer, consists of senior officers of the Company, and is responsible for ensuring that the Company is managing its principal enterprise-wide risks, as well as other key risk areas such as operations, environmental, information technology, compliance and business continuity. On an asset level, we consider risks to our facilities resulting from climate change and mitigation strategies. For example, due to increased risks from severe weather, we are reinforcing existing critical facilities to withstand storm surges and all future substations will be flood hardened to further protect our system. This may include the installation of an elevated equipment platform and reinforcement against ground level water infiltration. Identified risks and opportunities are analyzed to determine likelihood, impact and risk horizon. Risks with the highest composite score are prioritized. Formal, actionable and measurable mitigation plans are developed working with management to minimize the likelihood and impact of a risk event. Mitigation plan progress is tracked by ERM and verified through an ongoing key risk indicator process, which is reported to the Risk Committee at each meeting. Individual departments prioritize risks within their area of expertise facilitated by the ERM team using a consistent formal framework. Results are presented at a corporate level to the Risk Committee and senior team. Top enterprise risks, along with mitigation plans, are reported to the Finance Committee of the Board periodically.

Enterprise Energy Strategy and Business Development has responsibility for identifying business opportunities that help mitigate and reduce impacts of climate change, such as system resiliency, storm hardening, natural gas expansion, integration of distributed renewable resources, electric and natural gas vehicles, energy storage and expansion of our offshore wind platform to bring offshore wind to the region. It also supports states in implementing comprehensive energy strategies that seek to reduce carbon emissions.

The Environmental Affairs Department has responsibility for environmental compliance obligations, including those associated with GHG emissions. Our Environmental Management System (based on ISO-14001) is dedicated to ensuring we meet our commitment to preserve and respect the environment and communities in which we conduct business every day through compliance with environmental laws, continual evaluation of work practices that improve environmental performance and implementation of environmentally beneficial strategies whenever practicable. We utilize a robust cloud-based environmental data management system and standards library for document control and records retention, and have formalized procedures in place to minimize risks.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver
Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact
<Not Applicable>

Company- specific description
Renewable Portfolio Standards (RPS) - Each of the states in which Eversource does business has RPS requirements, which generally require fixed percentages of Eversource's energy supply to come from renewable energy sources such as solar, wind, hydropower, landfill gas, fuel cells and other similar sources. New Hampshire's RPS provision requires increasing percentages of the electricity sold to retail customers to have direct ties to renewable sources. In 2018, the total RPS obligation was 18.7 percent and it will reach 20.7 percent in 2020. Similarly, Connecticut's RPS statute requires increasing percentages of the electricity sold to retail customers to have direct ties to renewable sources. In 2018, the total RPS obligation was 25 percent and will reach 29 percent in 2020. Massachusetts' RPS program also requires electricity suppliers to meet renewable energy standards. For 2018, the requirement was 23.62 percent, and will reach 27.71 percent in 2020.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
78800000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
A REC represents 1 mwh produced from eligible renewable energy source. Minimum action to comply with RPS requires Alternative Compliance Payment (ACP). NH RPS statute requires provider to meet load by acquiring RECs representing generation from renewable energy. If provider is not able to meet RPS requirement by acquiring RECs, it must pay ACP per MWH. 2018 NH ACP price: Class I: $56.54; Class I Thermal: $25.69; Class II: $56.54; Class III: $55.00; Class IV: $28.00. 2018 CT ACP price: Class I: $55; Class II: $55; Class III: $31. 2018 MA ACP price: Class I: $68.95; SREC I: $426; SREC II: $350; Class II $28.30; Class II Waste: $11.32; Alternative Portfolio Standard (APS): $22.64.

Management method
Eversource purchases RECs from producers that generate energy from a qualifying resource and use them to satisfy the RPS requirements. The company satisfies REC requirements through a combination of electricity and REC purchases, or separate REC-only contracts. To the extent that the company is unable to purchase sufficient RECs, it makes up the difference between the RECs purchased and its total obligation by making an alternative compliance payment for each REC requirement for whichever company is under supplied. Eversource is also diversifying its energy portfolio to increase its renewable and low carbon energy resources and reducing the magnitude of risk. As one example, Eversource has installed and currently operates 58 MW of solar photovoltaic units in MA and sells the resulting renewable energy credits into the market to offset the cost of the program for customers. A second example involves state-specific agreements that facilitate development of clean and renewable projects. In Connecticut, there are several long-term contract opportunities, including the low emission/zero emission renewable credit program (LREC/ZREC), which to date has resulted in more than 1,900 behind-the-meter renewable energy projects. These 15-year REC contracts are expected to add 335.7 MW of new renewables in the state. Eversource is permitted to recover costs incurred in complying with RPS from their customers through rates.

Cost of management
78800000

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type
Physical risk

Primary climate-related risk driver
Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact
Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description
Severe weather such as winter ice storms, unusually heavy snow, or snow that occurs early in the season such, have the potential for extensive damage and extended service outages.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
576000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Over the years, Eversource has experienced significant storms in the form of tropical storms, blizzards, nor'easters and hurricanes. As a result, Eversource suffers damage to its transmission and distribution system, causing customer outages and the incurrence of costs to repair significant damage and restore customer service. The magnitude of restoration costs for major storms meet the criteria for cost deferral in CT, MA and NH. As a result, the storms had no material impact on Eversource's results of operations.

Management method
As a result of recent unprecedented storms, Eversource has further enhanced its processes and has implemented a series of risk mitigating measures. Excellence will be achieved via specific initiatives that address each of six focus areas highlighted in reviews: preparedness, scalability, coordination, communication, situational awareness and infrastructure hardening. Senior officers were appointed to lead emergency preparedness and infrastructure hardening to make the electric system more resistant to increasingly severe weather-related events; and CL&P developed a far-reaching and comprehensive proposal to improve system resiliency. The plan includes significant investments in: a) vegetation management (both enhanced tree trimming and trimming on a shorter cycle); b) structural hardening (strengthening field structures through upgrades to the current structure design and material standards, and upgrades to the poles and conductors); c) electrical hardening (upgrading electrical distribution conductors and protective devices on overhead circuits); and d) system automation and real time monitoring. Eversource also partnered with the University of Connecticut on two research projects to study options to harden town centers which offer critical services and to improve preparation to restore interrupted electric service to customers following a weather event and in 2015, we established the Eversource Energy Center in partnership with UConn.

Cost of management
576000000

Comment
Storm restoration cost deferrals are recorded for costs associated with major storm events for CL&P, NSTAR Electric, PSNH and WMECO that each company expects to recover from customers. A storm must meet certain criteria to qualify as a major storm with the criteria specific to each state jurisdiction and utility company. Once a storm qualifies as a major storm, all qualifying expenses incurred during storm restoration efforts are deferred and recovered from customers. The Potential financial impact and Cost of management categories above have a zero value because Eversource companies recover qualified storm costs from customers.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Market: Changing customer behavior

Type of financial impact
<Not Applicable>

Company- specific description
Energy Efficiency measures reduce customer demand.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
454450000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Eversource administers energy efficiency programs for the benefit of customers in all of its operating company territories. It is important to have regulatory frameworks that do not tie electric and natural gas rates exclusively to volumes of sales. The cost of energy efficiency programs is fully recoverable from customers.

Management method
Energy efficiency is the lowest-cost fuel, substituting for generation at approximately four cents per kilowatt-hour. Energy efficiency is one of the most cost-effective ways to save money, create jobs, reduce greenhouse gas emissions, and enhance energy security. The savings decrease overall energy use and reduce peak demand. Peak demand describes a period of simultaneous, strong consumer demand, resulting in a strain on power generation plants. Therefore, reducing peak demand results in avoided capacity costs and can diminish the need for additional construction of generation plants. In 2018, customer participation in Eversource energy efficiency solutions was equivalent to two 125-megawatt (MW) power plants. Additionally, in 2018, Eversource energy efficiency programs generated approximately $215.3 million savings annually for our customers. Eversource spends approximately $500 million annually for energy efficiency programs.

Cost of management
454450000

Comment
Eversource is consistently recognized as a leader in energy efficiency by national industry organizations. We take great pride in helping our communities remain vibrant and successful by designing and delivering programs emulated across the country. The Eversource energy efficiency portfolio reflects and responds to the way our customers live and use energy today, and takes a multiyear approach that enables us to help customers plan for the future. The American Council for an Energy-Efficient Economy (ACEEE) 2018 State Energy Efficiency Scorecard ranked MA first and CT fifth in the nation; and Eversource is the number one energy efficiency provider in the nation, according to Ceres' report, Benchmarking Utility Clean Energy. In 2019, Eversource received the ENERGY STAR® Partner of the Year–Sustained Excellence Award from the US EPA and the US DOE which recognized Eversource in CT, MA and NH for continued leadership in energy efficiency and commitment to the ENERGY STAR® program.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description

Our offshore wind business includes ownership interests in North East Offshore and Bay State Wind, which collectively hold power purchase agreements for the Revolution Wind and South Fork Wind projects and are in the process of negotiating a power purchase agreement for the Sunrise Wind project. Our offshore wind projects are being developed in partnership with Ørsted. This business also participates in opportunities for future solicitations for offshore wind in the Northeast U.S. On February 8, 2019, Eversource and Ørsted entered into a 50-50 partnership for key offshore wind assets in the Northeast. Eversource's initial payment and contribution under the terms of the partnership agreements totaled approximately $225 million for a 50 percent interest in North East Offshore, which holds the Revolution Wind and South Fork Wind power projects, as well as a 257 square-mile lease off the coasts of Massachusetts and Rhode Island. Eversource also has a 50 percent ownership in Bay State Wind, which holds the Sunrise Wind power project. Bay State Wind is located approximately 25 miles south of the coast of Massachusetts on a separate 300-square-mile ocean lease adjacent to the North East Offshore area and has the ultimate potential to generate at least 2,000 MW of clean, renewable energy. Together, the Bay State Wind and the North East Offshore lease sites jointly-owned by Eversource and Ørsted could eventually develop at least 4,000 MW of offshore wind generation. As of June 2019, Eversource's total equity investment balance in its offshore wind business was $499.5 million. In July 2019, Eversource made an additional capital contribution of $54.9 million.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

554400000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In February 2019, Eversource and Ørsted entered into a 50-50 partnership for key offshore wind assets in the Northeast. Eversource's initial payment and contribution under the terms of the partnership agreements totalled approximately $225 million for a 50% interest in North East Offshore, which holds the Revolution Wind and South Fork Wind projects, as well as a 257 square-

mile lease off the coasts of MA and RI. Eversource also has a 50% ownership in Bay State Wind, which holds the Sunrise Wind project. Bay State Wind is located approximately 25 miles south of the coast of MA on a separate 300-square-mile ocean lease adjacent to the North East Offshore area and has the potential to generate at least 2,000 MW of clean, renewable energy. Together, the lease sites jointly-owned by Eversource and Ørsted could eventually develop at least 4,000 MW of offshore wind generation. As of July 31, 2019, Eversource's total equity investment balance in its offshore wind business was $554.4 million.

Strategy to realize opportunity
Eversource and Ørsted are considering participation in the following opportunities for future solicitations for offshore wind based on each state's clean energy requirements: • Massachusetts' second offshore wind RFP for 400 MW to 800 MW was issued in May 2019. Bids are due in August 2019 and contracts are expected to be awarded to selected bidders by the end of 2019. Eversource and Ørsted are evaluating participation in the RFP. • Connecticut's offshore wind RFP for 400 MW (and up to 2,000 MW) is expected to be issued in August 2019, with bids due in September 2019 and contracts awarded to selected bidders by the end of 2019. Eversource and Ørsted are evaluating participation in the RFP.

Cost to realize opportunity
554400000

Comment
The competitive bid process for offshore wind precludes the company from providing specific cost information related to specific projects. The amounts shown under "Potential Financial Impact Figure" and Cost to realize opportunity" represent Eversource's equity investment in the partnership to date.

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Type of financial impact
Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description
In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. NSTAR Electric owns 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. We estimate our investment in these new facilities will be approximately $170 million. Eversource sells the solar energy it produces directly into the regional energy market managed by ISO New England and customers will benefit from the proceeds. Additionally, the company will receive Renewable Energy Credits for the power it produces and will pass the savings along to customers through electricity rates. The 70 MW of capacity from the 22 sites is enough to power more than 11,000 homes. Annual carbon emissions avoided is expected to total 36,000 metric tons - the equivalent of taking more than 7,600 cars off the road per year. These large-scale solar facilities directly contribute to Massachusetts' goal to have 27.71% renewable energy installed by 2020. The solar program focused on developing large-scale solar facilities on sites that offer economies of scale and cost-effective energy production. Some of the sites developed by the Eversource Solar Program included landfill and environmentally-challenged sites, which have few, or very restricted, alternative uses.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
170000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. NSTAR Electric owns 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. We estimate our investment in these new facilities will be approximately $170 million.

Strategy to realize opportunity
In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. Currently, NSTAR Electric owns and operates 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. NSTAR Electric sells the energy from the new facilities into the ISO-NE market.

Cost to realize opportunity
170000000

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of new technologies

Type of financial impact
Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description
Eversource received approval of $55 million for two energy storage projects as part of a Grid Modernization proposal in a rate case decision on November 30, 2017 - $40 million for Outer Cape Cod project and $15 million for a project on Martha’s Vineyard. Some benefits of the larger project - it will avoid the need to build 13 miles of distribution line through the Cape Cod National Seashore area and act as the equivalent to taking approximately 25,000 homes off the grid during peak hours. These investments will be recovered through a grid modernization tracking mechanism beginning when the project goes into service. Construction is expected to start at the end of 2019 and be in service by the end of 2020. The Massachusetts Department of Energy Resources established energy storage targets on 6/30/17 of 200 megawatt-hours for electric distribution companies by 1/1/20.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
55000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This $55 million investment will be recovered through a grid modernization tracking mechanism beginning when the project goes into service. Construction is expected to start at the end of 2019 and be in service by the end of 2020.

Strategy to realize opportunity
Eversource received regulatory approval of $55 million for two energy storage projects as part of a Grid Modernization proposal in a rate case decision on November 30, 2017. It involves $40 million for an Outer Cape Cod project and $15 million for a project on Martha's Vineyard.

Cost to realize opportunity
55000000

Comment
This $55 million investment will be recovered through a grid modernization tracking mechanism beginning when the project goes into service.

Identifier
Opp4

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Type of financial impact
Increased revenue through demand for lower emissions products and services

Company-specific description
Eversource received approval of $45 million for capital investment in electric vehicle charging infrastructure as part of a Grid Modernization proposal in a rate case decision on November 30, 2017 issued by the Massachusetts Department of Public Utilities. The five-year program will enable approximately 3,500 Level 2 and DC Fast Charger ports at publicly accessible locations. Our goal is to drive adoption of electric vehicles, enabling the installation of up to 3,500 charging ports in our Massachusetts service territory by the end of 2020 through this approved program. A potential benefit in driving adoption of electric vehicles at publicly accessible locations is that it should help to alleviate electric vehicles driver range anxiety, one of the barriers to electric vehicles adoption. This $45 million investment will be recovered through a grid modernization tracking mechanism beginning when the project goes into service. We are evaluating program options to file in Connecticut and New Hampshire. We believe the total investment opportunity across the three states could reach $500 million over the next decade.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
45000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This $45 million investment will be recovered through a grid modernization tracking mechanism beginning when the project goes into service.

Strategy to realize opportunity
Eversource received regulatory approval of $45 million for electric vehicle infrastructure commitments as part of a Grid Modernization proposal in a rate case decision on November 30, 2017.

Cost to realize opportunity
45000000

Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Our products are electricit, natural gas and water. Our services include the delivery of these products to the ultimate consumer. Eversource manages one of the nation's most extensive and successful energy efficiency programs and is recognized as the top U.S. utility for its energy efficiency program by advocacy organizations Ceres and ACEEE. These programs result in lower unit sales but costs are fully recoverable with incentives based on the effectiveness of the programs.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. Currently, NSTAR Electric owns and operates 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. The electricity from these facilities is delivered to the ISO-NE grid for distribution to customers. These facilities do not have a significant impact on our electric operations.
Adaptation and mitigation activities	Impacted	Eversource earns incentives based on the effectiveness of its energy efficiency programs and recovers costs associated with these costs on a dollar-for-dollar basis. Each of Eversource's electric and gas utilities in Connecticut and New Hampshire have decoupled distribution rates in place to mitigate the impact that the energy efficiency programs have on sales and financial condition.
Investment in R&D	Impacted	Offshore wind projects will have a more significant impact on our operations than our investment in electric vehicle infrastructure and energy storage. Each of these initiatives are important projects for Eversource.
Operations	Impacted	Costs associated with energy efficiency programs are recovered on a dollar-for-dollar basis so their financial impact is not significant.
Other, please specify	Not impacted	Not applicable.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Impacted	Eversource manages one of the nation's most extensive and successful energy efficiency programs and is recognized as the top U.S. utility for its energy efficiency program by advocacy organizations Ceres and ACEEE. These programs result in lower unit sales but costs are fully recoverable with incentives based on the effectiveness of the programs.
Operating costs	Impacted	Eversource manages one of the nation's most extensive and successful energy efficiency programs and is recognized as the top U.S. utility for its energy efficiency program by advocacy organizations Ceres and ACEEE. Eversource spends 5-7% of its revenues on energy efficiency programs.
Capital expenditures / capital allocation	Impacted	In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. Currently, NSTAR Electric owns and operates 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019.
Acquisitions and divestments	Impacted	In New Hampshire, Eversource owned approximately 1,200 MW of generation facilities. On January 10, 2018, Eversource completed the sale of its fossil fuel powered generation facilities with a total capacity of 1,100 MW. Subsequently, Eversource sold its hydro generation units in August 2018. Since the January 2018 transaction, no Eversource company has owned any fossil generation.
Access to capital	Impacted	Eversource has a very strong financial condition with superior credit ratings that provide needed access to the capital markets to support its significant capital expenditure program.
Assets	Impacted for some suppliers, facilities, or product lines	In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. Currently, NSTAR Electric owns and operates 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019.
Liabilities	Not impacted	Eversource manages one of the nation's most extensive and successful energy efficiency programs and is recognized as the top U.S. utility for its energy efficiency program by advocacy organizations Ceres and ACEEE. These programs result in lower unit sales but costs are fully recoverable with incentives based on the effectiveness of the programs.
Other	Not impacted	Not applicable.

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

We are continually evaluating risks and opportunities related to climate change that influence our strategy. We engage with regulators, customers and the investment community to guide our strategy as well as internal mechanisms to identify risks and opportunities specific to our company. Our Enterprise Risk Management program evaluates principal risks to our company, and we set corporate performance management goals related to energy efficiency (EE) and system reliability and resiliency. Our Environmental Affairs team guides, develops and implements initiatives working in partnership with stakeholders to reduce and mitigate the impacts of climate change. Additionally, we have developed a corporate Commitment to Environmental Sustainability and Carbon Neutrality focused on Climate Leadership, Clean Energy, Accountability and Stewardship (see attachment in C12.4) to guide our strategies to reduce our carbon footprint, bring clean, sustainable energy to the region, and be a responsible environmental steward.

We are continually evaluating physical and financial risks to our company relating to climate change. Customers' energy needs vary with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling represent their largest energy use. For water customers, conservation measures imposed by the communities we serve could impact water usage. 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. Severe weather, such as ice and snow storms, and hurricanes, may cause outages and property damage, which may require us to incur additional costs that may not be recoverable from customers. The cost to repair damage to our facilities and the potential disruption of their operations due to storms, or other natural disasters could be substantial, particularly as regulators and customers demand better and quicker response times to outages. If, upon review, our state regulatory authorities find that our actions were imprudent, some of those restoration costs may not be recoverable from customers.

Our Enterprise Energy Strategy and Business Development team has responsibility for energy policy and initiatives that impact climate change and as a result are pursuing opportunities to reduce regional emissions including natural gas expansion, electric and natural gas vehicle initiatives, grid modernization, energy storage projects, the development of additional solar facilities in Massachusetts and the development of several offshore wind projects in partnership with Ørsted. (See C4.5a for details on the offshore wind projects). The Energy Efficiency Department provides strategic direction for EE policies and programs. This responsibility includes program regulation, planning, design, implementation, administration, evaluation, marketing and product management. Our Government Affairs Department monitors and responds to state and federal climate and energy-related legislation.

In response to increasingly severe weather events, we have enhanced our emergency preparedness strategy, including the expansion of adaptation and resiliency programs. Climate policy and carbon reduction goals in the states we serve influence our strategic planning in the areas of EE opportunities and for natural gas expansion, and the supply and delivery of renewable energy.

We set aggressive goals through a sustained and integrated effort intended to provide innovative EE services and advance policy objectives and clean energy and climate plan goals of the states in our service area.

Our Eversource Energy Center is a unique partnership with the University of Connecticut to solve challenges for our customers where weather, climate and energy intersect. With 90% of power outages during storms caused by trees, our Stormwise program links forest management and community outreach with utility vegetation management to foster storm resistant trees and forests.

Our approach to reducing traditional end-use energy consumption includes offering expanded compensatory EE programs, appropriate deployment of smart grid and related infrastructure, and providing customers with information, management tools and pricing options to reduce end-use consumption.

Climate change has influenced our long-term strategy to lower carbon emissions in our region by adding renewables to the energy mix through generation and transmission expansion, by developing infrastructure to bring renewable and low carbon resources to market, and by offering EE programs to our customers.

Our strategy will help us gain strategic advantage over competitors by providing customers with cleaner energy choices and opportunities to be more energy efficient. The two aspects of climate change that influence many business decisions are reducing emissions & adapting to severe weather patterns. Our efforts include:

- Offshore wind projects (emissions reduction) take advantage of legislative opportunities to develop renewable generation capacity
- Natural gas expansion (emissions reduction) offers customers an additional fuel choice and enables broader use of cleaner, more efficient natural gas for space heating & industrial processes
- Large scale solar (emissions reduction) program in MA takes advantage of legislative opportunities to develop an additional 62 MW of solar electric generation capacity
- Electric and natural gas vehicle infrastructure (emissions reduction) will help to advance transition to alternative fuel vehicles and reduce emissions in the transportation sector
- Emergency preparedness & infrastructure hardening better positions us to respond to outages (adaptation/resiliency)

Battery storage projects being developed in MA provide opportunities to our customers (adaption/resiliency). The Outer Cape Community Battery Project will provide an innovative battery storage solution for one of the most vulnerable areas of our service territory from a storm perspective: Wellfleet, Truro, and Provincetown, MA. The state-of-the-art community battery will provide back-up power for customers these towns during a power outage on the distribution line that that serves these towns. The community battery is expected to provide 10 hours of back-up power in the winter and as much as 3 hours at the height of the busy summer season. It would improve reliability by 50% for customers in these towns. The battery will also defer the need to construct 13 miles of distribution line, much of which would be through the Cape Cod National Seashore. The project will utilize a lithium-ion, 25 MW/38 MWH battery system to supply power in the event of an emergency, like an outage. It will also help to offset high electric usage during summer months. It is one of two Eversource battery storage projects approved by the MA Department of Public Utilities. Construction is expected to start at the end of 2019 and be in service by the end of 2020.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Please select	Qualitative scenario analysis is performed by our Enterprise Risk Management (ERM) group. In addition to regularly scheduled reports by ERM of all of the Company's enterprise-wide risks and the results of the ERM Program, management reports periodically to the Finance Committee, other Board Committees or the full Board in depth on specific top enterprise risks. ERM also reports regularly to the Finance Committee on the activities of the Company's Risk Committee. The Risk Committee, chaired by the Executive VP and CFO, consists of senior officers of the Company, and is responsible for ensuring that the Company is managing its principal enterprise-wide risks, as well as other key risk areas such as environmental, information technology, compliance and business continuity. Qualitative and quantitative analysis is performed in our innovative partnership with University of Connecticut (UConn) on the Eversource Energy Center, which includes collaboration with utilities and industry partners as front runners in mitigating storm hazards, delivering improved reliability and increasing the resiliency of the electric grid. Through science-based solutions, including high-resolution weather and outage forecasting and 3-D aerial and ground imagery we are improving the delivery of reliable power and enhanced risk management in extreme weather by predicting a storm's impact and the locations of outages to proactively dispatch crews before storms arrive. Research on tree sway mechanics are also identifying why some trees and limbs break, while others bend with the motion of the wind or ice. Through Storm Outage Forecasting we are predicting a storm's impact in advance of its arrival to foresee the number and location of outages and proactively dispatch crews. Working with town officials, land managers and private land owners, we continue to investigate options for maintaining ecological functions and benefits of trees while reducing risk to infrastructure from trees during storms. Opportunities include forest management techniques in forested areas, and tree-planting or trimming protocols in more urbanized communities. This important research guides our close collaboration with towns on roadside forest management, and informs utility vegetation management best practices. The UConn Outage Prediction Model (OPM) forecasts a storm's impact, which Eversource combines with meteorological data to proactively pre-stage crews and expedite power restorations. The OPM provides an up to three-day advanced picture of a storm's anticipated impact, updated every six hours, and is a leading-edge approach in the electric industry. Outage predictions, along with proactive tree and forest management, are providing the greatest benefits for utility customers by avoiding and shortening outages, and enhancing electric system reliability. In addition, we incorporate information from forest inventories, biomechanics work, and tree trimming or forest management history into the OPM. Along with weather data and simulations of past and future storms, this model will help to position resources at the time of a storm to ensure the quickest possible recovery from storm damage. In 2017, Eversource and the Eversource Energy Center at UConn launched a new research partnership with Plymouth State University (PSU) in Plymouth, New Hampshire that will develop an outage prediction model for New Hampshire, particularly during winter storm conditions. Research conducted through PSU's meteorological degree program will focus on storm model and system damage forecasting based on analysis of historic weather data in New Hampshire. The partnership with PSU will help produce critical data that will enhance reliability for Eversource customers, and help the company plan the grid of the future, especially in areas deemed most susceptible to extreme winter weather conditions.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Scope

Scope 3: Purchased goods & services

% emissions in Scope

100

Targeted % reduction from base year

2.1

Base year

2018

Start year

2018

Base year emissions covered by target (metric tons CO2e)
14400706

Target year
2018

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% of target achieved
100

Target status
Achieved

Please explain
Eversource had an absolute target of 984,705 annual MWh savings from electric energy efficiency measures installed in 2018. Actual results indicate that Eversource's electric customers have achieved annual savings of 1,074,020 MWh or 109% of the 2018 target, resulting in an estimated 301,226 metric tonnes CO2e in avoided Scope 3 emissions, or a 2.1% reduction in its Scope 3 emissions. The calculations for CO2e reductions for electric customers for 2018 are based on the eGrid Regional Factors for NPCC New England for electricity and are CO2e. This is a new source used in 2018 to be consistent across all EDCs. Fossil fuel reductions are based on EIA emissions coefficients and are CO2.

Target reference number
Abs 2

Scope
Scope 3: Purchased goods & services

% emissions in Scope
100

Targeted % reduction from base year
0.93

Base year
2018

Start year
2018

Base year emissions covered by target (metric tons CO2e)
5256013

Target year
2018

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% of target achieved
100

Target status
Achieved

Please explain
Eversource had an absolute target of 8,641,810 annual therms savings from our customers for natural gas energy efficiency measures installed in 2018. Actual results indicate that Eversource's natural gas customers have achieved annual savings of 10,013,219 therms or 116% of the 2018 target resulting in an estimated 48,424 metric tonnes CO2e in avoided Scope 3 emissions, or a 0.93% reduction in its Scope 3 emissions.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target
Renewable energy target including electricity, heat, steam and cooling

KPI – Metric numerator
In 2018, we set a strategic goal to reduce regional GHG emissions by advancing clean energy projects that have the potential to bring 3,000 MW of renewable power to the region by 2030.

KPI – Metric denominator (intensity targets only)

Base year
2018

Start year
2018

Target year
2030

KPI in baseline year

KPI in target year

% achieved in reporting year
0

Target Status
Underway

Please explain
Goal Details: Eversource-proposed projects will help our region offset GHG emissions by facilitating the increased regional use of wind and solar power. We are pursuing offshore wind projects, expanding natural gas distribution lines to more homes and businesses to allow the burning of cleaner fuels, expanding the electric vehicle recharging station network, and installing solar projects to the maximum extent allowed by state governments. 2019 Goal Progress: With our expanded partnership with Ørsted, we are positioned to exceed our target.

Part of emissions target

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	
To be implemented*	1	5433400
Implementation commenced*	2	247190
Implemented*	5	390559
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative type
Low-carbon energy installation

Description of initiative
Natural Gas

Estimated annual CO2e savings (metric tonnes CO2e)
240000

Scope
Scope 3

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
31100000

Investment required (unit currency – as specified in C0.4)
700000000

Payback period
21-25 years

Estimated lifetime of the initiative
21-30 years

Comment
Within the Comprehensive Energy Strategy, Connecticut's leaders endorsed natural gas as the "fuel of choice" for the state, and recognized the emerging opportunity provided by shale gas for a lower-cost, cleaner, and domestically available fuel choice for Connecticut residents and businesses. Since 2013, the price differential between natural gas and oil has decreased, reducing demand for residential natural gas conversion; however, the updated 2018 CES reaffirms that natural gas remains a cost-effective, cleaner fuel choice, and further states that increased commercial and industrial demand is making up for most of the decreased residential demand. Eversource growth goals include bringing the choice of natural gas to more than 82,000 customers within its franchise areas in Connecticut. In addition, the plan will help reduce emissions by 820,000 tons, for a 7% reduction of total emissions in Connecticut. Also, natural gas emits 27% less carbon than #2 oil when used for space heating.

Initiative type
Fugitive emissions reductions

Description of initiative
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
7190

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
1000000000

Payback period
21-25 years

Estimated lifetime of the initiative
16-20 years

Comment
Eversource has agreed to voluntary accelerated main and service replacement programs in both CT and MA. In October 2014, local distribution companies in MA filed plans with the Department of Public Utilities to replace all aged non-cathodically protected steel, cast-iron, and wrought-iron natural gas distribution infrastructure in their service territories within a 20-to-25-year timeframe. In Connecticut, Eversource received approval through the 2018 rate case to further accelerate the replacement rate such that all leak-prone facilities will be replaced within 14 years. In 2019, Eversource has plans to invest $70 million in CT. This equates to approximately 31 miles of main replacement. In addition to continual investment to replace leak-prone infrastructure, our efforts to provide a safe and reliable system include: - a rigorous system of gas leak detection and maintenance programs that meet or exceed federal and state regulations; - aggressive leak response time goals that we consistently meet; - public awareness campaigns that promote leak identification and natural gas safety; - engagement with first responders to increase awareness and conduct training. Eversource plans to replace 470 miles of aging gas main during 2019-2023, projecting capital expenditures for these programs of nearly $1 billion. This voluntary replacement program will exceed our commitment to the Methane Challenge program of replacing 3% of cast iron and bare steel by 2021.

Initiative type
Other, please specify (Energy efficiency programs for customers)

Description of initiative
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
349650

Scope
Scope 3

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
215295600

Investment required (unit currency – as specified in C0.4)
454450000

Payback period
1-3 years

Estimated lifetime of the initiative
Ongoing

Comment
Energy efficiency programs are administered by each of the Eversource operating companies (The Connecticut Light and Power Company, NSTAR Electric Company, Public Service Company of New Hampshire, NSTAR Gas Company and Yankee Gas Services Company. Annual Monetary Savings is combined 2018 estimated annual savings for all Eversource customers.

Initiative type
Low-carbon energy purchase

Description of initiative
Other, please specify (Use of Compressed Natural Gas Vehicles in our Fleet)

Estimated annual CO2e savings (metric tonnes CO2e)
30

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
15000

Investment required (unit currency – as specified in C0.4)
2250000

Payback period

>25 years

Estimated lifetime of the initiative
6-10 years

Comment
We have 106 compressed natural gas (CNG) powered vehicles across our service territory that in 2018 consumed 16,163 gallon equivalent of natural gas, thus avoiding 30 metric tonnes of CO2e emissions. As of 2018, there are seven total CNG vehicle refueling compressor stations owned by Eversource that are used by our corporate fleet.

Initiative type
Process emissions reductions

Description of initiative
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)
3578

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
11000

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Eversource emitted 3,165.5 pounds SF6 for a reported emission rate of 0.70% for 2018 on nameplate capacity of 449,557 pounds. By using current proactive maintenance efforts, Eversource reduced SF6 emissions from a 1.5% baseline with cost of gas savings and increased system reliability.

Initiative type
Low-carbon energy installation

Description of initiative
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
36000

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
170000000

Payback period
21-25 years

Estimated lifetime of the initiative
21-30 years

Comment

Our solar program focuses on developing large-scale solar facilities on sites that offer economies of scale and cost-effective energy production. The Massachusetts DPU has authorized Eversource to own and operate up to 70 MW of solar generation facilities. Along with the significant environmental benefits, there are substantial cost-saving benefits for Eversource customers in the Bay State. The company estimates it will produce solar power for about 18 cents per kilowatt-hour, compared to upwards of 50 cents per kilowatt-hour for some private projects currently operating within the Commonwealth. We have constructed 22 solar generation facilities totaling 70 MW of solar capacity in Massachusetts, which is estimated to save nearly 36,000 metric tonnes of carbon per year. When all the new sites are operational in 2019, total Eversource solar generation will be enough to power more than 11,000 homes, and GHG emission reductions will be equivalent to taking 7,600 cars off the road per year. Four of our solar facilities are located on landfill or brownfield sites, which have few alternative uses.

Initiative type
Low-carbon energy purchase

Description of initiative
Other, please specify (Use of biofuel blend in place of diesel in Fleet operations)

Estimated annual CO2e savings (metric tonnes CO2e)
1301

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment
Eversource is committed to reducing emissions coming from the transportation sector by evaluating and implementing strategic changes to our fleet. Our fleet consists of approximately 5,200 vehicles, including light duty trucks for meter readers and bucket trucks for line workers. We have switched portions of our diesel equipment to operate on B5 and B20 biodiesel, an alternative fuel created by mixing diesel fuel and soybean oil and ethanol. In 2018, we burned more than 837,000 gallons of biodiesel fuel, displacing approximately 127,000 gallons of diesel fuel with a 1,301 metric tonne reduction in greenhouse gas emissions, which is equal to taking about 275 passenger vehicles off the road for one year. Eversource also has 29 bucket trucks that use a passive hybrid system to run the hydraulics operating the booms on the bucket trucks, eliminating the need to idle the engine to run the equipment, resulting in reduced emissions and quieter operation. We have also installed global position systems (GPS) in all of our fleet vehicles, which is reducing fuel consumption by optimizing the dispatch of vehicles already deployed in the field and by helping drivers to find the most direct route to the customer location or job site.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Renewable Portfolio Standards (RPS) exist in the three states in Eversource's service territory: CT, MA, NH. RPS require fixed percentages of energy supply to come from renewable energy sources such as solar, hydropower, landfill gas, fuel cells and other similar sources. Connecticut's RPS statute requires increasing percentages of the electricity sold to retail customers to have direct ties to renewable sources. In 2018, the total RPS obligation was 25 percent and will reach 29 percent in 2020. Massachusetts' RPS program also requires electricity suppliers to meet renewable energy standards. For 2018, the requirement was 23.62 percent, and will reach 27.71 percent in 2020. New Hampshire's RPS provision requires increasing percentages of the electricity sold to retail customers to have direct ties to renewable sources. In 2018, the total RPS obligation was 18.7 percent and it will reach 20.7 percent in 2020. Eversource system companies are in full compliance with current state RPS obligations.

Method	Comment
Dedicated budget for energy efficiency	Eversource is consistently recognized as a leader in energy efficiency by national industry organizations. We take great pride in helping our communities remain vibrant and successful by designing and delivering programs that are emulated by others across the country. Our energy efficiency portfolio reflects and responds to the way our customers live and use energy today and takes a multi-year approach that enables us to help customers plan for the future. The American Council for an Energy-Efficient Economy (ACEEE) 2018 State Energy Efficiency Scorecard ranked Massachusetts first and Connecticut fifth in the nation; and Eversource is the number one energy efficiency provider in the nation, according to Ceres' report, Benchmarking Utility Clean Energy. In 2019, Eversource received the ENERGY STAR® Partner of the Year – Sustained Excellence Award from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The EPA and DOE recognized Eversource in Connecticut, Massachusetts and New Hampshire for continued leadership in energy efficiency and commitment to the ENERGY STAR® program. Energy efficiency is the lowest-cost fuel, substituting for generation at approximately four cents per kilowatt-hour. Energy efficiency is one of the most cost-effective ways to save money, create jobs, reduce GHG emissions, and enhance energy security. Efficiency reduces peak demand, a period of simultaneous, strong consumer demand that results in a strain on power generation. Reducing peak demand results in avoided capacity costs and can diminish the need for additional construction of generation plants. In 2018, customer participation in Eversource energy efficiency solutions was equivalent to two 125-megawatt (MW) power plants. Additionally, in 2018 Eversource energy efficiency programs generated approximately $215.3 million in savings annually for our customers.
Dedicated budget for other emissions reduction activities	Eversource has been involved in the R&D of plug-in electric vehicles and the supporting infrastructure through industry organizations and independent projects and is in the process of collaborating with various municipalities and large customers to test EV charging stations at locations in Connecticut and Massachusetts to guide next steps.
Dedicated budget for other emissions reduction activities	In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. NSTAR Electric owns 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service 2019. We estimate our investment in these new facilities will be approximately $170 million.
Employee engagement	Eversource has undertaken various actions to reduce its internal carbon footprint generated by employees and facilities such as energy efficiency improvements in its buildings, teleconferencing capabilities and administering Eco-Miles, an innovative program to track employee mileage savings through a variety of commuting options. Launched in 2009, employees use an online payroll reporting system to track miles not driven through carpooling, public transportation, telecommuting or other mileage savings options. Since 2009, our Eco-Miles program has tracked employee mileage savings through a variety of commuting options to capture driven miles avoided through carpooling, public transportation, telecommuting, or other mileage-savings options. Eversource employees have collectively logged over 3.4 million Eco-Miles since the program started, the equivalent of saving 156,794 gallons of gasoline and 1,379 metric tonnes of CO2e.
Internal incentives/recognition programs	All Eversource management employees are eligible to receive incentive payments based on performance. Performance goals for certain employees may include environmental targets, support for emerging environmental laws, regulations and policy (including climate change related); stewardship and sustainable business practices such as Energy Efficiency, and other GHG mitigation; and supporting strategic initiatives related to energy efficiency, distributed generation, Smart Grid and renewable energy.
Partnering with governments on technology development	Since 2012, we have partnered with volunteer municipalities and businesses on research to understand charging station installation requirements, electric vehicle (EV) driver charging habits and potential future electric system requirements. We are using this research to address identified challenges and develop mitigation strategies to better serve our customers. We have hosted and participated in several EV Ride & Drive events, giving customers a chance to experience EVs on the road, as well as sponsoring EV dealer training. We also offer an EV resource page on Eversource.com, with fast access to EV information and resources. All of the states that we serve are pursuing comprehensive plans that include the advancement of EVs. CT and MA are 2 of 8 states that signed the State Zero-Emission Vehicle Program MOU in 2013, with a combined two-state target of having 450,000 zero-emission vehicles on the road by 2025, along with the supporting infrastructure. In CT, we are working with the Dept of Energy and Environmental Protection on programs to support EV adoption and development of EV charging infrastructure. Details on these programs can be found at the EVconnecticut website. Eversource funding for DEEP programs has included the installation of publicly accessible DC Fast Chargers and grants to increase the number of publicly available EV charging stations. In MA, we serve as a commissioner on the Zero Emission Vehicle Commission, which studies the economic and environmental benefits and costs of increased use of zero emission vehicles. We are working with the Dept of Energy Resources on programs to advance the EV market through a combination of studies, outreach and education. Additionally, in 2019, we announced a partnership with Mass Audubon to install EV charging stations at seven of the conservation nonprofit's network of wildlife sanctuaries. In NH, Eversource serves as a member of the Electric Vehicle Charging Stations Infrastructure Commission to study and recommend policy on the development of EV charging stations throughout the state. In 2019, Eversource, as part of a joint effort with the state's other utilities, proposed a plan for creating a DC Fast Charging network across NH's travel corridors to bolster NH's tourism industry and bring more business to the local economy while providing environmental and sustainability benefits.
Partnering with governments on technology development	Our offshore wind business includes ownership interests in North East Offshore and Bay State Wind, which collectively hold power purchase agreements for the Revolution Wind and South Fork Wind projects and are in the process of negotiating a power purchase agreement for the Sunrise Wind project. Our offshore wind projects are being developed in partnership with Ørsted. This business also participates in opportunities for future solicitations for offshore wind in the Northeast U.S. On February 8, 2019, Eversource and Ørsted entered into a 50-50 partnership for key offshore wind assets in the Northeast. Eversource's initial payment and contribution under the terms of the partnership agreements totaled approximately $225 million for a 50 percent interest in North East Offshore, which holds the Revolution Wind and South Fork Wind power projects, as well as a 257 square-mile lease off the coasts of Massachusetts and Rhode Island. Eversource also has a 50 percent ownership in Bay State Wind, which holds the Sunrise Wind power project. Bay State Wind is located approximately 25 miles south of the coast of Massachusetts on a separate 300-square-mile ocean lease adjacent to the North East Offshore area and has the ultimate potential to generate at least 2,000 MW of clean, renewable energy. Together, the Bay State Wind and the North East Offshore lease sites jointly-owned by Eversource and Ørsted could eventually develop at least 4,000 MW of offshore wind generation.

Method	Comment
Other	Connecticut's 2013 Comprehensive Energy Strategy (CES) included recommendations in the areas of energy efficiency; industrial energy needs; and electricity supply, including renewable power, natural gas and transportation. Within the CES, Connecticut's leaders endorsed natural gas as the "fuel of choice" for the state, and recognized the emerging opportunity provided by shale gas for a lower-cost, cleaner, and domestically available fuel choice for Connecticut residents and businesses. Since 2013, the price differential between natural gas and oil has decreased, reducing demand for residential natural gas conversion; however, the updated 2018 CES reaffirms that natural gas remains a cost-effective, cleaner fuel choice, and further states that increased commercial and industrial demand is making up for most of the decreased residential demand. To learn more about natural gas expansion in Connecticut, please visit our website. Eversource growth goals include bringing the choice of natural gas to more than 82,000 customers within its franchise areas in Connecticut. In addition, the plan will help reduce emissions by 820,000 tons, for a 7% reduction of total emissions in Connecticut. In 2018, we added 9,248 new natural gas heating customers system-wide with 4,434 customers in Connecticut. We also expanded our distribution system by 47 miles of pipe in 2018.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Product

Description of product/Group of products

Eversource is consistently recognized as a leader in energy efficiency by national industry organizations. We take great pride in helping our states and communities remain vibrant and successful by designing and delivering programs that are emulated by others across the country. The Eversource energy efficiency portfolio reflects and responds to the way our customers live and use energy today, and takes a multiyear approach that enables us to help customers plan for the future. The American Council for an Energy-Efficient Economy (ACEEE) 2018 State Energy Efficiency Scorecard ranked Massachusetts first and Connecticut fifth in the nation; and Eversource is the number one energy efficiency provider in the nation, according to Ceres' report, Benchmarking Utility Clean Energy. In 2019, Eversource received the ENERGY STAR® Partner of the Year – Sustained Excellence Award from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The EPA and DOE recognized Eversource in Connecticut, Massachusetts and New Hampshire for continued leadership in energy efficiency and commitment to the ENERGY STAR® program. The savings decrease overall energy use and reduce peak demand. Peak demand describes a period of simultaneous, strong consumer demand, resulting in a strain on power generation plants. Therefore, reducing peak demand results in avoided capacity costs and can diminish the need for additional construction of generation plants. Actual results indicate energy efficiency programs administered by Eversource's operating companies enabled customers to reduce electric consumption by 1,074,020 MWh and natural gas by approximately 10 million therms in 2018, which equates to approximately 349,650 metric tons of CO2e reduced annually.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year

5.38

Comment

Level of aggregation

Company-wide

Description of product/Group of products

Our offshore wind business includes ownership interests in North East Offshore and Bay State Wind, which collectively hold power purchase agreements for the Revolution Wind and South Fork Wind projects and are in the process of negotiating a power

purchase agreement for the Sunrise Wind project. Our offshore wind projects are being developed in partnership with Ørsted. This business also participates in opportunities for future solicitations for offshore wind in the Northeast U.S. On February 8, 2019, Eversource and Ørsted entered into a 50-50 partnership for key offshore wind assets in the Northeast. Eversource's initial payment and contribution under the terms of the partnership agreements totaled approximately $225 million for a 50 percent interest in North East Offshore, which holds the Revolution Wind and South Fork Wind power projects, as well as a 257 square-mile lease off the coasts of Massachusetts and Rhode Island. Eversource also has a 50 percent ownership in Bay State Wind, which holds the Sunrise Wind power project. Bay State Wind is located approximately 25 miles south of the coast of Massachusetts on a separate 300-square-mile ocean lease adjacent to the North East Offshore area and has the ultimate potential to generate at least 2,000 MW of clean, renewable energy. Together, the Bay State Wind and the North East Offshore lease sites jointly-owned by Eversource and Ørsted could eventually develop at least 4,000 MW of offshore wind generation. These projects are expected to reduce emissions by approximately 5,433,400 metric tons of CO2e annually. The calculation of the reduction of CO2e emissions is based on 4,000 MW of capacity, a 50% capacity factor and current grid intensity.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year
0

Comment
The entry reported in column labeled "% revenue from low carbon product/s in the reporting year" is 0 because the offshore wind facilities are not yet in operation. Revolution Wind is a 704 MW offshore wind power project that will deliver power to RI (400 MW) and CT (304 MW). The project was selected under separate CT and RI RFPs based on each state's clean energy requirements. In CT, two 20-year power purchase agreements (PPAs) for a total of 200 MW were executed and have been approved by the PURA, and two 20-year PPAs for a total of 104 MW were executed and are awaiting regulatory approval. In RI, a 20-year PPA for 400 MW was executed and has been approved by the RI Public Utilities Commission. South Fork Wind is a 130 MW offshore wind power project that will interconnect into eastern Long Island where it will deliver power to the Long Island Power Authority (LIPA). This project was selected by the LIPA, and a 20-year PPA for 90 MW was executed. Subsequently, the LIPA agreed to expand the original PPA to 130 MW. Fork Wind is expected to be commissioned by the end of 2022. Revolution Wind is expected to be commissioned in 2023. The completion dates are subject to permitting, engineering, siting and finalizing power purchase agreements, where applicable. In February 2019, Eversource and Ørsted submitted joint proposals under the project name Sunrise Wind in response to a New York State Energy Research and Development Authority (NYSERDA) RFP that was issued in November 2018. In July 2019, NYSERDA announced that Sunrise Wind was selected to negotiate a 25-year PPA for an 880 MW offshore wind facility. Sunrise Wind will be developed 30 miles east of Montauk Point, Long Island. Subject to contract signing and Eversource’s and Ørsted's final investment decisions, the project is expected to be operational in 2024. Eversource and Ørsted are considering participation in the following opportunities for future solicitations for offshore wind based on each state's clean energy requirements: • MA's second offshore wind RFP for 400 MW to 800 MW was issued in May 2019. Bids are due in August 2019 and contracts are expected to be awarded to selected bidders by the end of 2019. • CT’s offshore wind RFP for 400 MW (and up to 2,000 MW) is expected to be issued in August 2019, with bids due in September 2019 and contracts awarded to selected bidders by the end of 2019.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2013

Base year end
December 31 2013

Base year emissions (metric tons CO2e)
1903214

Comment
The Scope 1 baseline has been revised based on changes made to emissions factors used to calculate emissions associated with the gas distribution system. Eversource had previously used emissions factors in 40CFR Part 98, subpart W, but changed to use those provided by the Massachusetts Department of Environmental Protection in 310 CMR 7.73.

Scope 2 (location-based)

Base year start
January 1 2013

Base year end
December 31 2013

Base year emissions (metric tons CO2e)
836299

Comment
The Scope 2 baseline for both market-based and location-based emissions have been revised based on changes made to accounting procedures which led to changes in the calculations of line loss and associated emissions.

Scope 2 (market-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
789238

Comment
The Scope 2 baseline for both market-based and location-based emissions have been revised based on changes made to accounting procedures which led to changes in the calculations of line loss and associated emissions.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule
Other, please specify (Massachusetts Department of Environmental Protection emissions factors under 310 CMR 7.73)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Data was collected and calculated by the Eversource companies primarily using the World Resource Institute GHG Protocol tool. Stationary combustion emissions associated with electric generating unit used more accurate Continuous Emissions Monitoring System (CEMS) data. US EPA reporting protocol under 40 CFR Part 98 was used for calculating SF6 emissions. Gas distribution emissions calculated using emissions factors provided by Massachusetts Department of Environmental Protection in 310 CMR 7.73. Please note: 2013 is the baseline year for the first inventory of the merged companies. Prior to 2013, emissions were reported to CDP separately for NSTAR and Northeast Utilities, now known as Eversource Energy.

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
169369

Start date
January 1 2018

End date
December 31 2018

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
642868

Scope 2, market-based (if applicable)
642868

Start date
January 1 2018

End date
December 31 2018

Comment
Our calculations are the same this year for both location and market-based emissions. Our suppliers report that emissions profile/emissions factors are the same as the regional (eGRID) factors.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Capital goods

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
All fuel and energy related activities are included in Scope 1 and 2.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Waste generated in operations

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
2913

Emissions calculation methodology
The Greeenhouse Gas Protocol and WRI Transport Tool. This figure includes all mobile sources for business travel.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
Data is collected from third-party providers as well as our internal payroll system. There should be no exclusions.

Employee commuting

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
We include leased assets in Scope 1 and 2.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
We have no downstream transportation and distribution of our products. They are considered "complete/used" upon sale.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
There is no additional processing of our products. They are considered “complete/used” upon sale.

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
19656719

Emissions calculation methodology
Method based on USEPA reporting and electric and natural gas sales.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
As a regional gas and electric distribution company, we purchase and deliver electricity and natural gas for customer use. Scope 3 carbon emissions associated with the use of natural gas are determined by US EPA protocol for 40 CFR 98, Subpart NN. Carbon emissions associated with customer use of electricity are estimated based on reported sales and the use of current federally reported carbon emissions from local generation.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
There is no “end of life treatment” of our products. They are considered “complete/used” upon sale.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
There are no downstream leased assets for Eversource.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
All Eversource franchises (business divisions) are included in Scope 1 and 2.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
All Eversource properties and investment assets are included in Scope 1 and 2.

Other (upstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Other (downstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0000961432

Metric numerator (Gross global combined Scope 1 and 2 emissions)
812237

Metric denominator
unit total revenue

Metric denominator: Unit total
8448201000

Scope 2 figure used
Location-based

% change from previous year
34

Direction of change
Decreased

Reason for change
The intensity figure is metric tonnes per CO2e per USD Scope 1 and Scope 2 emissions decreased mainly due to the decrease in emissions (the numerator), reflecting the sale of fossil generation facilities. Also, total revenues (the denominator) increased in 2018.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	89880	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	46593	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	64	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	32832	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	169369

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Eversource CT (The Connecticut Light and Power Company and Aquarion)	23423
Eversource MA East (NSTAR Electric Company and NSTAR Gas Company)	17061
Eversource NH (Public Service Company of New Hampshire)	756
Eversource CT (Yankee Gas)	7824
Eversource Other (Includes SF6, methane leaks and mobile sources)	120305

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Generation	0
Other Stationary Combustion	49064
Mobile Sources	40831
Gas Leakage	46737
SF6 Leakage	32737

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	642868	642868	657281.03	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

By activity

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Eversource CT (The Connecticut Light and Power Company)	196717	196717
Eversource MA East (NSTAR Electric Company)	338190	338190
Eversource NH (Public Service Company of New Hampshire)	84838	84838
Eversource Other (includes electricity purchased and steam and chilled purchased	23123	23123

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity Use	22543	22543
Line Loss	619745	619745
Steam and Chill	580	580

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities		<Not Applicable>		
Divestment	316739	Decreased	28.1	Scope 1 and 2 emissions have decreased from 1,128,976 metric tons CO2e in 2017 to 812,237 metric tons CO2e in 2018 for a total decrease of 316,739 metric tons CO2e due primarily to the sale of our fossil-fueled generation assets.
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	513259.4	513259.4
Consumption of purchased or acquired electricity	<Not Applicable>	0	88116.16	88116.16
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	1666.98	1666.98
Consumption of purchased or acquired cooling	<Not Applicable>	0	775.05	775.05
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	603817.59	603817.59

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
85242.83

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
165023.41

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
89843.53

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization
87089.79

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Propane Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
86059.84

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

MWh fuel consumed for self-cogeneration or self-trigeneration

Comment

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor
73.96

Unit
kg CO2 per million Btu

Emission factor source
40 CFR Part 98 Subpart C, Table C-1, C-2

Comment
Fuel use is calculated and emissions reported here using USEPA emissions factors from CFR Part 98.

Liquefied Petroleum Gas (LPG)

Emission factor
61.71

Unit
kg CO2 per million Btu

Emission factor source
40 CFR Part 98 Subpart C, Table C-1, C-2

Comment
Fuel use is calculated and emissions reported here using USEPA emissions factors from CFR Part 98.

Motor Gasoline

Emission factor
70.22

Unit
kg CO2 per million Btu

Emission factor source
40 CFR Part 98 Subpart C, Table C-1, C-2

Comment
Fuel use is calculated and emissions reported here using USEPA emissions factors from CFR Part 98.

Natural Gas

Emission factor
66.88

Unit
kg CO2 per million Btu

Emission factor source
Fuel use is calculated and emissions reported here using USEPA emissions factors from CFR Part 98.

Comment

Propane Gas

Emission factor

Unit
Please select

Emission factor source

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	8824	0	8824	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor
Other, please specify (Our suppliers report that emissions profile/factors are the same as the regional factors.)

Low-carbon technology type
Please select

Region of consumption of low-carbon electricity, heat, steam or cooling
Please select

MWh consumed associated with low-carbon electricity, heat, steam or cooling

Emission factor (in units of metric tons CO2e per MWh)

Comment
Our calculations are the same this year for both location and market-based emissions. Our suppliers report that emissions profile/factors are the same as the regional factors.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
2.7

% total procurement spend (direct and indirect)
69

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
As a member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA), we engage with suppliers as an industry to seek opportunities to improve environmental sustainability. Utility members, including Eversource, ask that their top suppliers participate in the survey, which has provided trended data for our group as a whole since the survey was launched in 2009. Questions that our top suppliers are asked to respond to include their GHG emissions, water and waste data, and environmental compliance; whether they have environmental improvement goals in place around emissions, energy. water, and waste; and whether they have third party verification of environmental reporting. We are able to get details for our individual suppliers, trend their performance over time and see how our suppliers compare to results for the EUISSCA group suppliers as a whole. EUISSCA also provides an opportunity for Eversource, along with our utility peers, to engage with suppliers on ways to reduce the impact of climate change through education, technology improvements and the strength of an industry group to influence change. In 2018, Eversource's Vice President Supply Chain, Environmental Affairs and Property Management, Ellen Angley, served on the Alliance's executive committee as Treasurer. In 2019, we are continuing our leadership role with Ms. Angley serving as the Vice Chair and in 2020 she will become the EUISSCA Chair.

Impact of engagement, including measures of success
Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) sends the survey to Eversource's top 100 suppliers. Response rate was 80% in 2018, an improvement over the 2017 response rate of 41%. We obtain details for our individual suppliers, trend their performance over time and see how our suppliers compare to results for the EUISSCA group suppliers as a whole. EUISSCA also provides an opportunity for Eversource, along with our utility peers, to engage with suppliers on ways to reduce the impact of climate change through education, technology improvements and the strength of an industry group to influence change. Through our membership in EUISSCA we also have the opportunity to engage with our suppliers at conferences as well as network with other utilities to identify opportunities for environmental improvement.

Comment
100 suppliers

Type of engagement
Compliance & onboarding

Details of engagement
Included climate change in supplier selection / management mechanism
Climate change is integrated into supplier evaluation processes
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
99

% total procurement spend (direct and indirect)
99

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
In 2018, Eversource enhanced our Sustainable Supply Chain Program and has developed ten questions that are now being asked of all suppliers as part of the bid process in our requests for proposals (RFPs). Initially we surveyed our top 100 suppliers by spend to develop a baseline, and as of 2018 all suppliers are required to respond to sustainability questions during a bid, including whether they offer environmental improvement opportunities for the product/service they are bidding on, whether they publicly report GHG emissions and if they have voluntary goals to reduce energy consumption, emissions, waste and water. This survey is used as part of our supplier scorecard and as an engagement mechanism to identify environmental improvement opportunities in the services they offer to Eversource as well as in their own operations. Eversource is committed to working collaboratively with our strategic suppliers to drive value, reduce risk, and strengthen our competitive position through regular performance management meetings with our top vendors. We have formalized our Supplier Relationship Management (SRM) Program with a critical subset of our top-spend suppliers. Eversource's SRM Program includes: • Templated scorecards, including standardized Key Performance Indicator (KPI) scoring methodology and consistent Safety, Diversity, and Sustainability KPIs across all supplier scorecards. • Quarterly Performance & Development review meetings facilitated by a procurement agent with business partners and suppliers • Annual Review & Strategic Planning meetings facilitated by a procurement agent with Eversource and supplier senior-level management. • Vendor Risk Profile comprised of IT Security, Physical Security, and Safety incorporated into the Vendor Review Calendar.

Impact of engagement, including measures of success

Eversource is engaging with our suppliers to identify opportunities to implement environmental improvement opportunities into our operations to lower our greenhouse gas emissions and reduce risk in our supply chain. Our SRM Program and the inclusion of sustainability questions in our RFPs helps to communicate our expectations and the importance of sustainability and environmental responsibility to our suppliers. Targeting meetings with suppliers as a result of their responses to our questions have led to improvements that will help to reduce emissions and waste, and help to identify and address risks related to climate change. One measure of our success is our Investment Recovery. Through our redeployment, return, recycle, and resale efforts we prevent materials from needlessly entering the waste stream, in a manner which protects the integrity of both our environment and our financial resources. Scrap metal recycling is the largest single category within our Investment Recovery program. Eversource work centers and project sites across all states serve as collection points for scrap metal. Through site visits, field training, and strong collaboration with our teams and vendors, we have successfully grown our program, supported by the tighter controls and accountability which our new investment recovery software provides. Eversource has successfully increased the volume of recycled metals by 82% over the past three years. Our growing capability in managing surplus materials from projects and our own facilities allows us to redeploy materials to other job sites or work centers, thus limiting unnecessary purchases. Where surplus materials cannot be used, they are returned to the manufacturer to serve the needs of others in our industry. We sell or donate material and used assets as a final means of preventing waste, giving equipment, materials and a wide range of assets a second life in other businesses.

Comment

In 2019, we are further engaging with suppliers to identify potential risks and implement improvement opportunities.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Collaboration & innovation

Details of engagement

Other – please provide information in column 5

% of customers by number

64.5

% Scope 3 emissions as reported in C6.5

99.99

Please explain the rationale for selecting this group of customers and scope of engagement

Energy efficiency programs create a reduction of emissions by supporting the use of less energy and fuel by our customers and the region. Eversource helps to shape new, forward-looking energy efficiency policies, legislation and regulations in each of the states in which we operate. Programs vary by state and details are available to all customers on our Save Money and Energy pages at Eversource.com. We partner with our regulators and stakeholders to offer statewide energy efficiency initiatives, which are marketed under the brands Energize CT, Mass Save and NHSaves. We engage with our customers through our website, monthly bill inserts, radio and television advertising and social media. Additionally, our energy efficiency team presents at community events such as conventions, economic development forums and town meetings. In 2018, customer participation in Eversource energy efficiency programs was equivalent to two 125 MW power plants. All Eversource customers have access to our Energy Savings Plan, located on Eversource.com, which enables customers to examine how they are currently using energy, how they compare to customers with more efficient use, and how they can reduce their energy costs by creating an energy savings plan. Eversource works with businesses small and large to identify and implement energy improvement opportunities, reduce operational costs, and increase productivity and competitiveness. We retain teams of highly skilled technical staff dedicated to connecting customers to those solutions and to the attractive financial incentives that help facilitate implementation. Additionally, we establish long-term strategic partnerships with high energy users. These multi-year agreements provide a roadmap for energy-efficient construction and upgrades and feature aggressive energy and carbon reduction goals. These partnerships enable larger customers to better plan and forecast their investments, ensure that they have the engineering support needed, and leverage the benefits resulting from a comprehensive approach to energy efficiency.

Impact of engagement, including measures of success

The American Council for an Energy-Efficient Economy (ACEEE) 2018 State Energy Efficiency Scorecard ranked Massachusetts first and Connecticut fifth in the nation; and Eversource is the number one energy efficiency provider in the nation, according to Ceres' report, Benchmarking Utility Clean Energy. In 2019, Eversource received the ENERGY STAR® Partner of the Year – Sustained Excellence Award from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The EPA and DOE recognized Eversource in Connecticut, Massachusetts and New Hampshire for continued leadership in energy efficiency and commitment to the ENERGY STAR® program. In 2018, Eversource energy efficiency programs generated

approximately $215 million savings annually for our customers. In 2018, Eversource electric customers realized annual savings of more than 1.1 billion kWh saved, which could power nearly 128,000 homes for a year. Lifetime savings of Installed Measures are more than 11.2 billion kWh, which could power over 1.3 million homes for a year. In 2018, Eversource natural gas customers annual savings equaled more than 10 million therms, which could heat more than 13,800 homes for a year. Lifetime savings of installed measures equate to more than 140 million lifetime therms saved, which could heat more than 194,000 homes for a year. Lifetime CO2e reductions equaled 683,036 metric tons reduced, which is equivalent to over 145,000 cars driven for one year.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
100

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Eversource provides information to all of our customers on our actions to prepare for and mitigate the effects of climate change. We communicate through targeted communications, social media, bill inserts, our website, and customer forums on our reliability and resiliency efforts, as well as initiatives to bring clean energy to the region. During storm events we utilize multiple channels to communicate with our customers on outages and restoration times. Partnering with our communities, we have pre-identified critical facilities such as hospitals, nursing homes, police and fire departments, in order to prioritize initial life and safety emergency response actions. Residents with life-sustaining medical equipment in their homes receive proactive outbound calls from us with storm readiness and awareness tips. Our customers receive outage and restoration updates for their electric service by text, email or phone, which include time of restoration, outage cause, status updates, and restoration completion. In 2018, our electric customers experienced service interruptions on average only about once every year-and-a-half, placing Eversource in the top quartile for electric reliability among our peers. We invested a record $2.83 billion in electric and natural gas delivery systems and customer service infrastructure in 2018. As many customers noted during punishing storms in March and May of 2018, which created historic damage, our investments in automating our system are paying off. Many customers were highly complimentary of restorations that took place in hours or minutes. In the most severe circumstances, when restorations took several days, they marveled not only at the work of our crews, but at our communications infrastructure, which provided accurate updates of our progress that allowed them to plan and prepare.

Impact of engagement, including measures of success
The Edison Electric Institute (EEI) presented Eversource with the EEI “Emergency Recovery Award” for its outstanding power restoration efforts after three consecutive nor’easters hit Connecticut, Massachusetts, and New Hampshire in March 2018. The Emergency Recovery Award is given to select EEI member companies to recognize their extraordinary efforts to restore power to customers after service disruptions caused by severe weather conditions or other natural events

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
6

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Eversource identifies and addresses climate change risks related to water due to more frequent, intense storms and periods of dry weather. For our 228,000 Aquarion Water customers, we implement strategies to protect water availability, water quality, and water source management for today and the future. We engage with all of our water customers on our Water Conservation Plan, which is designed to educate consumers on the importance of conserving water as a natural resource through customer mailers, advertising, and social media. We have also implemented a “Two Day A Week” irrigation policy for water customers in some towns in Connecticut to reduce demand.

Impact of engagement, including measures of success
Results of our “Two Day A Week irrigation policy have resulted in savings of 10%-20% of total water demand in Southwest Fairfield

County, Connecticut and reduce the need for further restrictions during drought.

C12.1c

(C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.

Energy efficiency programs facilitate a reduction of emissions by supporting the use of less energy and fuel by our customers and the region. Energy Efficiency programs are evaluated periodically to measure success of the programs. At this time, energy efficiency programs are prioritized based on the policies and decisions made by each state's regulating agencies (such as the CT Department of Environment and Energy, the MA Department of Public Utilities and the NH Public Utilities Commission) and customer preference.

Eversource engages with environmental stakeholders as other partners in the value chain to communicate our Commitment to Environmental Sustainability, which was released in 2017. Our Commitment underscores our environmental priorities and highlights our role as a key catalyst for clean energy. This statement is an important component of our vision for how we conduct our business today and for future generations. Our engagement strategy has involved ongoing communications to external environmental groups, economic development organizations, customers and our employees using our Commitment as a platform to educate them on Eversource initiatives related to climate change and environmental strategy.

Eversource also engages with our employees as other partners in our value chain to educate and encourage them to undertake actions to reduce their carbon emissions. Eco-Miles is a program that we launched in 2009 to track employee mileage savings through a variety of commuting options. Employees use our online payroll reporting system to track miles not driven through carpooling, public transportation, telecommuting or other mileage savings options. We publicize this option on our intranet and link to resources including how to use our technology resources for online meetings and local public transportation. Eversource employees have collectively logged over 3.4 million Eco-Miles since the program started, the equivalent of saving 156,794 gallons of gasoline and 1,379 metric tonnes of CO2e.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	Eversource's leadership team works closely with lawmakers and regulators in each of the states in which it operates to shape new energy legislation, regulations and policy that focus on energy efficiency and maintaining Eversource's position as an industry-leading energy efficiency provider. The Company also engages directly with a wide variety of stakeholders and policy makers on energy efficiency issues through its membership on the New England Clean Energy Council, Massachusetts Energy Efficiency Advisory Council, the Connecticut Energy Efficiency Board and the NH Energy Efficiency & Sustainable Energy Board.	Massachusetts Green Communities Act of 2008
Clean energy generation	Support	In December 2016, the Massachusetts Department of Public Utilities approved NSTAR Electric's application to develop 62 MW of new solar power facilities in addition to the 8 MW of existing solar power facilities. Currently, NSTAR Electric owns and operates 58 MW of solar power facilities on sites in Massachusetts that were completed from 2010 through 2018. We expect the remaining 12 MW of new facilities to be in service in 2019. Along with the significant environmental benefits, there are substantial cost-saving benefits for Eversource customers in the Bay State. The company estimates it will produce solar power for about 18 cents per kwh, compared to upwards of 50 cents per kwh for some private projects currently operating within the Commonwealth. The total solar capacity of 70 MW is enough to power more than 11,000 homes and is estimated to save nearly 36,000 metric tons of carbon per year - equivalent to taking 7,600 cars off the road per year. We estimate our investment in these new facilities will be approximately $170 million.	An Act Relative to Solar Energy - Approved April 11, 2016
Other, please specify (Comprehensive Energy Plan)	Support	In 2013, Connecticut issued a comprehensive energy strategy. The strategy included a series of policy proposals to expand energy choices, improve environmental conditions, create clean energy jobs, and enhance the quality of life for customers in the state. It also included an initiative for expanding natural gas use with a goal of providing nearly 300,000 utility customers with access to natural gas, building an estimated 900 miles of new natural gas mains, and estimates of capital costs to be incurred by natural gas utility companies to connect customers on or near natural gas mains. In addition to natural gas expansion, the strategy calls for a significant expansion of energy efficiency investment in Connecticut, a review of Connecticut's Renewable Energy Portfolio Standards (including Canadian hydroelectric generation as a qualifying resource), and investment in alternative fuel transportation. Many of the recommendations in the strategy required actions by the PURA and the legislature. Eversource was actively involved in this legislation.	Public Act No. 13-298 - An Act Concerning Implementation of Connecticut's Comprehensive Energy Strategy and Various Revisions to the Energy Statutes
Other, please specify (Regulation of Methane)	Support	In July 2014, Massachusetts enacted "An Act Relative to Natural Gas Leaks" (the Act). The Act establishes a uniform natural gas leak classification standard for all Massachusetts natural gas utilities and a program that accelerates the replacement of aging natural gas infrastructure. The program enables companies, including NSTAR Gas, to better manage the scheduling and costs of replacement. The Act also calls for the Massachusetts Department of Public Utilities (DPU) to authorize natural gas utilities to design and offer programs to customers that will increase the availability, affordability and feasibility of natural gas service for new customers. NSTAR Gas filed the Gas System Enhancement Program (GSEP) with the DPU on October 31, 2014. NSTAR Gas' program accelerates the replacement of certain natural gas distribution facilities in the system within 20 years. The GSEP includes a new tariff by which NSTAR Gas collects the costs for the program on an annual basis. On April 30, 2015, the DPU approved the GSEP.	An Act Relative to Natural Gas Leaks
Clean energy generation	Support	On August 8, 2016, Massachusetts legislation was enacted that requires Electric Distribution Companies (EDCs) to jointly solicit RFPs and enter into long-term contracts for offshore wind and clean energy, such as hydro-power, land-based wind or solar. On March 31, 2017, the EDCs, including Eversource, and the Massachusetts Department of Energy Resources issued a joint RFP for 9.45 terawatt hours of clean energy per year, such as hydropower, land-based wind or solar. The RFP sought proposals for long-term contracts of 15 to 20 years to provide the state's EDCs with clean energy generation.	MA Bill H.4568 - An Act to Promote Energy Diversity
Clean energy generation	Support	On June 7, 2019, the Governor of Connecticut signed legislation that authorizes the development of offshore wind in Connecticut. Among its provisions, the legislation authorizes the state to purchase up to 2,000 MW of offshore wind.	CT HB 7156 - An Act Concerning The Procurement of Energy Derived from Offshore Wind

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Various executives from Eversource served on boards in 2018. Eversource collaborates with many government and non-governmental organizations and associations to advance its sustainability activities and continuously learn of new or better ways to improve our presence on this planet. Many of these organizations take a position on climate change and promote the sharing of best practices and continuous improvement in corporate responsibility areas. The first example includes: Northeast Clean Energy Council (James Hunt, III, Eversource's Senior Vice President - Regulatory Affairs and Chief Communications Officer on Board in 2018).

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Northeast Clean Energy Council (NECEC, formerly New England Clean Energy Council) supports local, state and federal initiatives to advance state, regional and federal clean energy policy through the following activities: Develops new clean energy policy proposals and proposals for program designs; Advocates for legislation to grow the clean energy sector; Engages with policy makers and regulatory agencies to influence clean energy policy and regulations; Hosts public events on clean energy policy and finance issues; Conducts research on barriers to industry growth. NECEC consults with its members and other clean energy stakeholders to educate policymakers and advance the effectiveness of its advocacy for policy and regulations that create demand and support development and deployment of clean energy technologies.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
Environmental Business Council of New England (Eversource Director of Environmental Affairs, Catherine Finneran, on Board in 2018)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Environmental Business Council of New England (EBC) was established in 1990 by environmental and energy company executives who began meeting on a regular basis to exchange ideas and share experiences. The EBC was the first organization in the United States established to support and foster the development of the environmental industry. Its goal is to enhance business and job growth of both established and emerging environmental and energy businesses. The EBC is committed to supporting its members by: providing member companies with an array of programs, activities, and information to enable them to stay on the cutting edge of environmental and energy technologies, management and regulatory developments; and creating networking opportunities that facilitate meaningful relationships between leaders in the industry, leading to collaboration and teaming.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position and regulatory requirements on various issues that impact Eversource.

Trade association
American Council for an Energy Efficient Economy (ACEEE) (Penni McLean-Conner, Eversource's Chief Customer Officer and Senior Vice President serves as Chair of the Board of Directors).

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The American Council for an Energy-Efficient Economy (ACEEE) is dedicated to advancing energy efficiency as a means of promoting economic prosperity, energy security and environmental protection. ACEEE fulfills its mission by: Conducting in-depth technical and policy assessments; Advising policymakers and program managers; Working collaboratively with businesses, government officials, public interest groups and other organizations; Organizing conferences and workshops; Publishing books, conference proceedings and reports; and Educating consumers and businesses. Projects are carried out by ACEEE staff and selected energy efficiency experts from universities, national laboratories and the private sector. ACEEE's program areas include: Energy Policy, Outreach and Research (including programs on buildings and equipment, utilities, industry, agriculture, transportation, behavior, economic analysis, and international).

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association

Consortium for Energy Efficiency (CEE) (Tilak Subrahmanian, Eversource's Vice President of Energy Efficiency serves on their Board)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Consortium for Energy Efficiency (CEE) is the US and Canadian consortium of gas and electric efficiency program administrators that works together to accelerate the development and availability of energy efficient products and services for lasting public benefit.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
Edison Electric Institute (James J. Judge, Chairman, President and CEO of Eversource, served on Board in 2018; Jeffrey Kotkin, Vice President, Investor Relations, ESG Steering Committee Member during 2018)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Edison Electric Institute (EEI) is the association that represents all U.S. investor-owned electric companies. Its members provide electricity for 220 million Americans, operate in all 50 states and the District of Columbia, and directly employ nearly 500,000 workers. Safe, reliable, affordable, and clean electricity powers the economy and enhances the lives of all Americans. EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums in order to make a significant and positive contribution to the long-term success of the electric power industry in its vital mission to provide electricity to foster economic progress and improve the quality of life. The ESG Steering Committee focused on developing voluntary ESG reporting to the investment community, that is concise and consistent for our industry, to include practices, programs, and initiatives designed to support the company's transition to a lower carbon and increasingly sustainable energy future.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
American Gas Association (Eversource President of Gas Operations William Akley was a board member and on Safety Committee in 2018; Jeffrey Kotkin, Vice President, Investor Relations, ESG Steering Committee Member during 2018)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The American Gas Association (AGA) represents more than 200 local energy companies that deliver clean natural gas throughout the United States. More than 68 million residential, commercial and industrial customers across the nation receive their reliable, affordable supplies of natural gas from AGA members—and natural gas meets almost a quarter of America's energy needs. AGA is committed to leveraging and utilizing America's abundant, domestic, affordable and clean natural gas to help meet the nation's energy and environmental needs. AGA represents companies delivering natural gas safely, reliably, and in an environmentally responsible way to help improve the quality of life for their customers every day. Its mission is to provide clear value to its membership and serve as the indispensable, leading voice and facilitator in promoting the safe, reliable, and efficient delivery of natural gas to homes and businesses across the nation. AGA: 1) Conducts programs and develops standards to help enhance the safe delivery of natural gas to consumers; 2) Advocates for natural gas industry issues, regulatory constructs and business models that are priorities for the industry; 3) Promotes growth in the efficient use of natural gas by emphasizing before a variety of stakeholders the benefits of clean, abundant natural gas as part of the solution to the nation's energy and environmental goals; 4) Facilitates the exchange of information and improvement of performance metrics to help members achieve operational excellence; 5) Helps members manage and respond to the energy needs of customers, regulatory trends, natural gas or capital market issues and emerging technologies; 6) Collects, analyzes and disseminates information to opinion leaders, policy makers and consumers about the benefits provided by energy utilities and the natural gas industry; and 7) Encourages the development, commercialization, and regulatory acceptance of natural gas end-use technologies.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association

Trade association
Northeast Gas Association (2018 member)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Northeast Gas Association (NGA) is a regional trade association that focuses on education and training, technology research and development, operations, planning, and increasing public awareness of natural gas in the Northeast U.S. Its mission is to promote and enhance the safe, reliable, efficient, and environmentally responsible delivery of natural gas to customers in the region, and to advocate for the industry from production to delivery. NGA represents natural gas distribution companies, transmission companies, liquefied natural gas importers, and associate member companies. These companies provide natural gas to over 10 million customers in nine states (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont).

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
Electric Power Research Institute (EPRI) (2018 member)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Electric Power Research Institute, Inc. (EPRI) conducts research and development relating to the generation, delivery and use of electricity for the benefit of the public. EPRI brings together scientists and engineers as well as experts from academia and the industry to help address challenges in electricity. Its research provides both short- and long-term solutions that enable the transformation of power systems to be more flexible, resilient and connected. Its ultimate goal is to provide society with safe, reliable, affordable and environmentally responsible electricity.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences

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Trade association
New England Women in Energy and the Environment (Catherine Finneran, Eversource's Director of Environmental Affairs serves on the Board of Directors and Membership Chair, and Edna Karanian, Eversource's Director of Gas Supply, is on the Advisory Board).

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
New England Women in Energy and the Environment (NEWIEE) harnesses the passion, intelligence and leadership experience of New England women to promote and encourage public interest in the energy and the environment sectors. Comprised of members across the public and private sectors, as well as various age groups, NEWIEE is also a stimulating forum for networking, sharing of expertise and information, and mentoring. It is the goal of NEWIEE to foster a dynamic and enthusiastic environment for those who care about energy and environmental issues in order to encourage the development of creative solutions to energy and environmental issues.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource including regulatory developments and industry trends.

Trade association
MIT Center for Energy Efficiency Policy Research (Tilak Subrahmanian, Eversource's Vice President of Energy Efficiency)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Center for Energy and Environmental Policy Research (CEEPR) promotes rigorous and objective empirical research at MIT on issues related to energy and environmental policy to support decision-making by government and industry. The results of the research are disseminated through publications, workshops, educational programs, and other public outreach activities. Economics research at CEEPR is integrated with engineering and science in collaboration with faculty throughout MIT. The relevance and

validity of the research is enhanced through cooperation with government and industry associates in countries around the globe.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) In 2018, Eversource's Vice President Supply Chain, Environmental Affairs and Property Management, Ellen Angley, served on the Alliance's executive committee as Treasurer. In 2019, we are continuing our leadership role with Ms. Angley serving as the Vice Chair and in 2020 she will become the EUISSCA Chair.)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Alliance aspires to be known as the leader in establishing a robust and sustainable electric utility industry supply chain including advancing the maturity level of our members and stakeholders. The Alliance's mission is to work with its members and interested stakeholders to minimize the impacts on the environment of our supply chain operations. This will be accomplished by: 1) Developing voluntary consensus standards and frameworks; 2) Working with stakeholders and value chain partners to identify and exchange successful practices; and 3) Delivering tangible business value to member organizations through the application of sustainability practices.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

Trade association
Boston Green Ribbon Commission (Penni McLean-Conner, Eversource's Chief Customer Officer and Senior Vice President, member)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The mission of the Green Ribbon Commission (GRC) is to convene leaders from Boston's key sectors to support the outcomes of the City's Climate Action Plan. Boston is committed to reducing greenhouse gas emissions 25 percent (over 2005) by 2020 and achieving net zero carbon energy sources by 2050, even as the city grows. City leaders have also pledged to prepare, in numerous ways, for the effects of climate change. The GRC provides a forum for representatives of the private sector and the City to discuss, plan and act on the opportunities, challenges, ideas, and requirements of preparing Boston to meet the imperatives of climate change.

How have you influenced, or are you attempting to influence their position?
Actively participate in meetings and work with organization to understand its position on various issues that impact Eversource in order to reconcile differences.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
Yes

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Eversource strongly supports customer energy efficiency programs and funding mechanisms to make these programs consistently and widely available. Eversource is a strong proponent of policies and programs to promote electric and natural gas vehicles. Since 2012, Eversource has partnered with volunteer municipalities and businesses on research to understand charging station installation requirements, driver charging habits and potential future electric system requirements. We are using the research to address identified challenges and develop mitigation strategies to better serve our customers. We host and participate in several EV Ride & Drive events, giving customers a chance to experience EVs on the road, and sponsor EV dealer training. Our EV resource page on Eversource.com offers fast access to EV information and resources. We host and participate in several EV Ride & Drive events, giving customers a chance to experience EVs on the road, and sponsor EV dealer training. Our EV resource page on Eversource.com offers fast access to EV information and resources.

All of the states that we serve are pursuing comprehensive plans that include the advancement of EVs. Connecticut and Massachusetts are two of eight states that signed the State Zero-Emission Vehicle Program Memorandum of Understanding in 2013, with a combined two-state target of having 450,000 zero-emission vehicles on the road by 2025, along with the supporting infrastructure. In Connecticut, we are working with the Department of Energy and Environmental Protection (DEEP) on programs to support EV adoption and development of EV charging infrastructure. Details on these programs can be found at EV Connecticut. Eversource funding for DEEP programs has included the installation of publicly accessible DC Fast Chargers and grants to increase the number of publicly available EV charging stations.

In Massachusetts, Eversource serves as a commissioner on the Commonwealth's Zero Emission Vehicle Commission, which studies the economic and environmental benefits and costs of increased use of zero emission vehicles. We are working with the Department of Energy Resources on programs to advance the EV market through a combination of studies, outreach and education. Additionally, in 2019, we announced a partnership with Mass Audubon to install EV charging stations at seven of the conservation nonprofit's network of wildlife sanctuaries.

In New Hampshire, Eversource serves as a member of the Electric Vehicle Charging Stations Infrastructure Commission, to study and recommend policy on the development of EV charging stations throughout the state. In 2019, Eversource, as part of a joint effort with the state's other utilities, proposed a plan for creating a DC Fast Charging network across New Hampshire's travel corridors to bolster New Hampshire's tourism industry and bring more business to the local economy while providing environmental and sustainability benefits.

Eversource has participated in climate adaptation planning in all three states in which it operates (CT, MA and NH). A recent example of an Eversource adaptation measure was its construction of a uniquely designed substation to meet the much-needed distribution capacity in the South Boston Waterfront area of Massachusetts. The $131 million substation is on a 25,000 square foot concrete and steel platform that is 15 feet above ground to withstand the worst storms or tidal surges.

The Eversource Energy Center at the University of Connecticut (UConn) is an innovative energy company and university partnership. Our state-of-the-art research, technology and software are solving real-world challenges for our customers where weather, climate and energy intersect. The Eversource Energy Center is establishing strategic partnerships nationally in the areas of grid resilience, security and modernization. With the Electric Power Research Institute, we are developing a collaboration on storm damage recovery and situational awareness. 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. Within UConn, we work with the Connecticut Institute for Resilience and Climate Adaptation to address the "Sustainability and Resilience" theme of the university's academic plan.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Eversource's regulatory and government affairs departments monitor and engage regulators on current and upcoming climate and energy related legislation in the states where Eversource operates and on the federal level.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In other regulatory filings

Status
Complete

Attach the document
2018 Eversource Annual Report.pdf

Page/Section reference
Page opposite inside back cover (Governance; pages 2-4 (Strategy); and pages 13-16 (Risk Factors).

Content elements
Governance
Strategy
Risks & opportunities

Comment
2018 Eversource Annual Report

Publication
In other regulatory filings

Status
Complete

Attach the document
2019 Eversource Proxy Statement.pdf

Page/Section reference
Page 19 (Meetings of the Board and its Committees); pages 12-24 (Governance); and pages 21-24 (Eversource Sustainability/ESG section involves strategy).

Content elements
Governance
Strategy
Risks & opportunities
Other metrics

Comment
2019 Eversource Proxy Statement

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Eversource 2018 Sustainability Report.pdf

Page/Section reference
Page 4, 32, 33 (Governance); pages 3, 6, 8 (Strategy); pages 8, 22 (Risks & opportunities); pages 9, 10 (Emissions figures); page 11 (Emissions targets); and pages 49, 50 (Other metrics).

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
2018 Eversource Sustainability Report

Publication
In voluntary communications

Status
Complete

Attach the document
Eversource's Commitment to Environmental Sustainability and Carbon Neutrality.pdf

Page/Section reference
Page 2 (Governance); pages 1, 2 (Strategy); pages 1, 2 (Risks & opportunities); pages 1, 2 (Emissions targets).

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment
Eversource's Commitment to Sustainability and Carbon Neutrality

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C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Manager, Investor Relations	Business unit manager

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms