



CLIMATE ACTION PLAN

Climate-Ready Groton

Prepared by Kim Lundgren Associates, Inc. and Fuss & O'Neill

Table of Contents

Letter from the Town Manager.....

2

Climate Action Accomplishments to Date.....

3

Creating a *Climate-Ready Groton*.....

5

Climate Change in Groton.....

7

Reducing Groton’s Climate Pollution.....

9

Community Priorities & Perspectives.....

11

Action Plan.....

13

Buildings & Energy.....

15

Community Preparedness & Resilience.....

17

Infrastructure & Land Use.....

19

Natural Resources & Consumption.....

21

Transportation & Mobility.....

23

Closing & Endnotes.....

25

Letter from the Town Manager

Dear Groton Community,

I am pleased to present Groton’s first community-wide Climate Action Plan. As we face the growing challenges of climate change—rising seas and flooding rivers, heavier rains, and intensifying heat—we must act together to reduce Groton’s contributions to climate change and protect the community we know and love for generations to come.

The *Climate-Ready Groton Climate Action Plan* is a community-led roadmap for building a resilient, healthy, and thriving community. This plan is the result of collaboration between Town staff, Boards and Commissions, local organizations, and community members, and was created to advance the following Guiding Principles:

- **Climate Resilience:** Increasing the capacity of the Groton community to prepare for, respond, and adapt to climate hazards
- **Equity & Inclusion:** Addressing challenges that affect underrepresented communities and prioritizing opportunities that are beneficial to them
- **Greenhouse Gas Emissions Reduction:** Minimizing Groton’s contribution to climate change through reducing greenhouse gas emissions
- **Transparency & Accountability:** Communicating openly and clearly with Town stakeholders about plans, resource allocation, and progress on goals, strategies, and actions

Climate-Ready Groton is built on practical, achievable goals that reflect our community’s priorities and capacity for action. This plan focuses on steps we can take together—right now and in the coming years—to make measurable progress. Our goals align with state efforts and reflect our shared responsibility to invest in sustainable strategies that cut pollution and build long-term resilience.

Groton has already taken meaningful steps to mitigate climate change and prepare our community for its impacts. Now, with *Climate-Ready Groton*, we have an actionable roadmap to protect what we love and ensure Groton remains a vibrant, resilient place for generations to come. We hope you will join us in this effort.

Sincerely,



John Burt, Town Manager



Climate Action Accomplishments to Date

Climate-Ready Groton is the Town of Groton’s first comprehensive Climate Action Plan, but it is certainly not the first time that the Town has taken steps to advance climate action and resilience. For more than 15 years, Groton has sought to lead by example through the following policies, projects, and programs.



SEPTEMBER AND DECEMBER 2008

A new Task Force on Climate Change and Sustainability was created to study the impacts of climate change on Groton, develop recommendations for community action, and explore how Groton could become a more sustainable community.

JUNE 2009

The Town joined ICLEI, providing access to climate modeling tools and strategies to address climate change.

JUNE 2009–2011

The Town participated in a federally supported Coastal Adaptation and Climate Preparedness planning initiative, conducting vulnerability assessments, stakeholder workshops, and developing early adaptation strategies that informed later municipal planning efforts.

JANUARY 2011

A new policy was created to review Capital Improvement Plan projects to ensure they align with sustainability goals.

MARCH 2021

Town Council approved a resolution requiring climate change, resilience, and sustainability to be core functions of Town government.

OCTOBER 2019

Groton achieved Bronze certification through the Sustainable CT program, recognizing actions that support sustainability, resilience, and community well-being.

APRIL 2019

The Resilience and Sustainability Task Force was established to be the implementer of the recommendations from the previous Task Force.

FEBRUARY 2011

The Task Force released its Final Report which concluded with A Call for Action, emphasizing the benefits of acting now to reduce energy use, protect forests and wetlands, and prepare for increasing risks from hurricanes and major nor’easters already affecting Groton.

JUNE 2023

The first Sustainability and Resilience Manager was hired and a foundation for dedicated municipal leadership on sustainability and climate resilience was formed. Early neighborhood-based public outreach efforts strengthen local partnerships that support ongoing community engagement and resilience initiatives to this day.

JANUARY 2024

Downtown Mystic Resiliency and Sustainability Plan was completed to address climate-related flooding risks, coastal vulnerabilities, and long-term economic and infrastructure resilience in the Mystic area.

JUNE 2026

Climate-Ready Groton was released, establishing a framework to guide the Town’s future climate mitigation, adaptation, and long-term resilience efforts.



NOVEMBER 2024

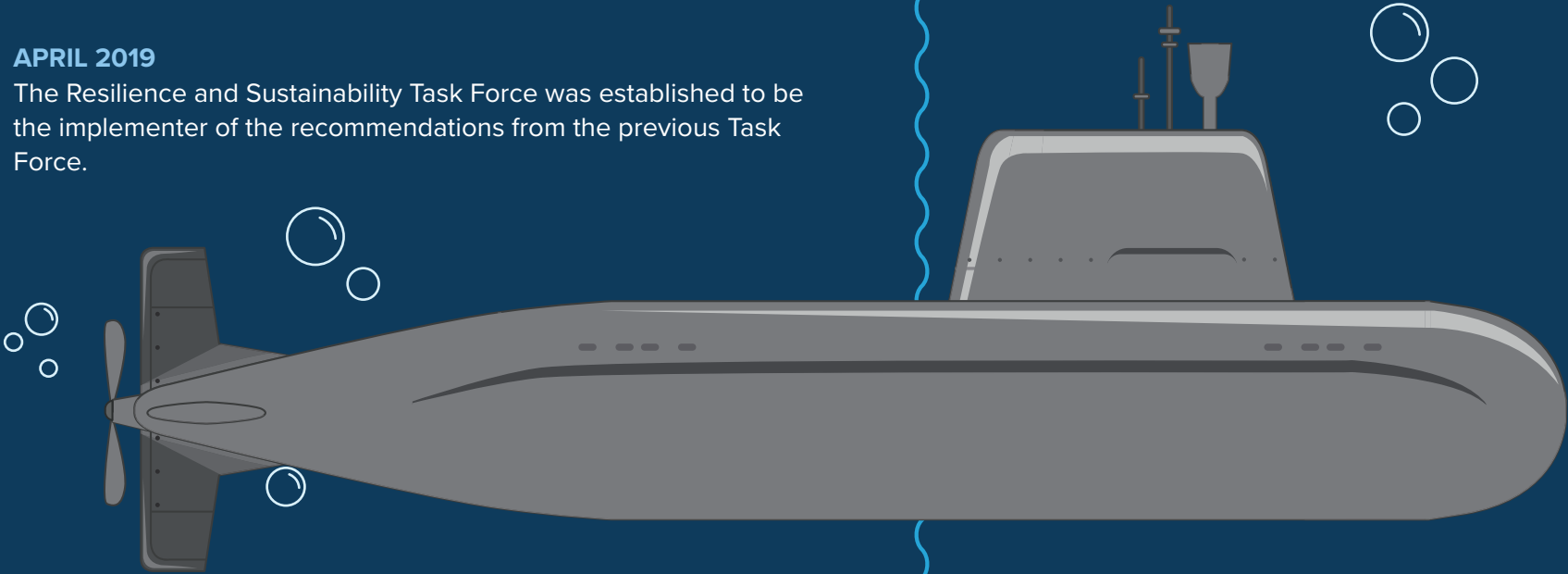
The Town confirmed it will move forward with its first comprehensive Climate Action Plan, *Climate-Ready Groton*.

OCTOBER 2024

Groton elevated the Sustainable CT certification to Silver reflecting years of collaborative, community-driven action across resilience, equity, and environmental stewardship.

JUNE 2024

Leaders from the community worked together with the Connecticut Nature Conservancy to identify hazards, strengths, and vulnerabilities within the Town, resulting in a list of priority actions to improve resilience.



Creating a Climate-Ready Groton

From the wooded uplands to the shoreline of Long Island Sound, Groton is defined by its natural beauty, historic charm, and diverse communities—from Pleasant Valley to Poquonnock Bridge to Mystic and everywhere in between. Each neighborhood has unique needs, but we are all united by a deep commitment to our community and a shared responsibility to protect it.

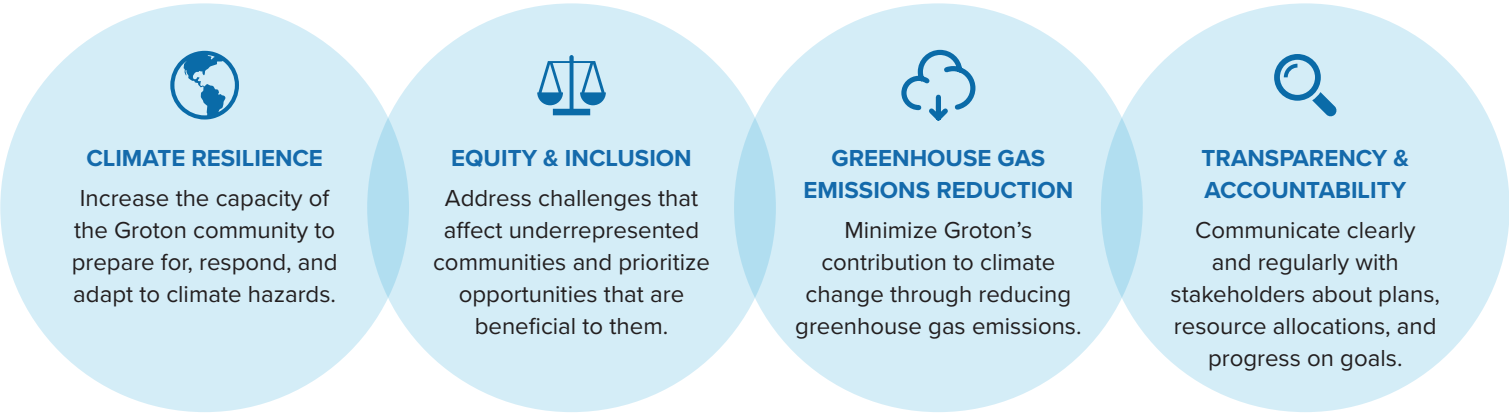
As Groton looks to the future, the growing impacts of a changing climate pose real challenges for our community. Along our coastlines and in our inland neighborhoods, the signs are now becoming harder to ignore: elevating sea levels, more frequent intense storms, flooding rivers, and extreme heat.

Climate-Ready Groton is our call to action. This is a plan shaped by the people of Groton because creating a climate-ready future will take all of us. *Taking Action Together* means building a safer, stronger future where we all benefit from collaborative climate action. By coming together across our community, we can protect what we love and ensure Groton remains a vibrant, resilient place for generations to come.

Note: As Groton Long Point has established its own plans within the Climate Action scope, Climate-Ready Groton does not directly apply to this region. Ongoing collaboration between Groton Long Point and Groton will ensure that the implementation of Climate-Ready Groton remains comprehensive and unified across the regions.

GUIDING PRINCIPLES

Four guiding principles were selected to represent Groton’s aspirations for the development and implementation of *Climate-Ready Groton*.



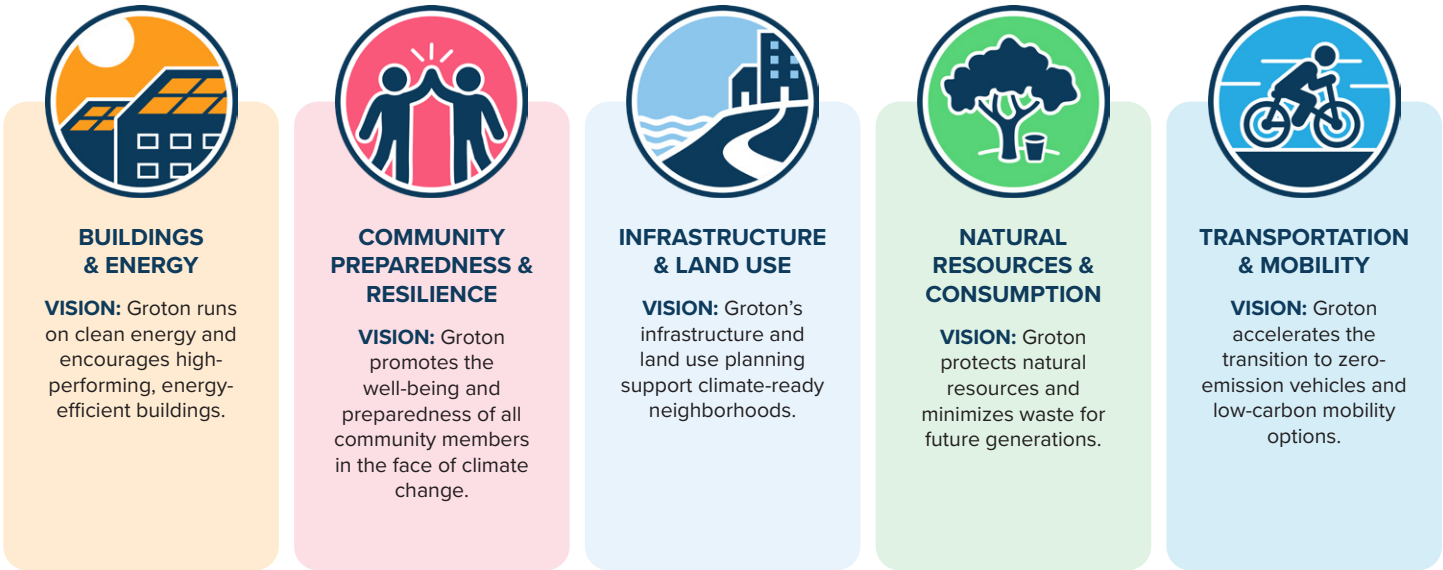
To address the current and future impacts of climate change, the **Climate-Ready Groton Plan** is comprised of goals, strategies, and actions that seek to:

- 1** Reduce greenhouse gas emissions, the primary pollutants causing the Earth’s climate to change
- 2** Enable the Groton community to adapt to the impacts of climate change



CLIMATE-READY GROTON FOCUS AREAS

Climate-Ready Groton is strategically designed around five key focus areas to address the Town’s sustainability and resilience goals comprehensively.



Groton 2035 and *Climate-Ready Groton* were developed simultaneously. *Groton 2035*, the Town’s Plan of Conservation and Development (POCD), outlines Groton’s strategic direction for the next ten years while the *Climate-Ready Groton Plan* identifies specific climate and sustainability actions for the Town and community to undertake over the next five years. Both plans apply everywhere in the Town of Groton except in the City of Groton and Groton Long Point.

The vision of the *Groton 2035* plan is to create a connected, inclusive and resilient community that honors its heritage and natural assets while fostering sustainable growth, economic opportunity, and quality of life through thoughtful, community-driven planning. Resiliency is woven into every aspect of the plan.



Climate Change in Groton

Groton is already experiencing the impacts of a changing climate, from the devastating destruction caused by flooding from Superstorm Sandy to the recent droughts brought on by extended dry periods in the summer of 2022. As the impacts caused by these climate-related hazards are only expected to worsen over the coming decades, Groton must prepare for and adapt to these changes today.

As part of the *Climate-Ready Groton* planning process, the Town conducted a Community-Wide Climate Vulnerability Assessment to identify how and where the community could be most impacted by climate change. The Assessment examined climate-related hazards such as flooding (both inland and coastal), heat, drought, windstorms, and cold weather.



Flooding and Intense Storms

IMPACTS

- Power outages
- Property damage
- Downed trees
- Costs to taxpayers
- Pollution from stormwater runoff
- Inaccessible roadways
- Erosion and shoreline damage

TRENDS & PROJECTIONS

The state’s average annual precipitation between 1980 and 2009 was more than two inches greater than between 1950 and 1979. Annual precipitation rates are projected to increase another four to five inches by midcentury (2040 to 2069). More of the rainfall is coming from big storms, which results in more flooding.

Sea level rise is also expected to increase by 20 inches in the Long Island Sound by 2050, contributing to coastal flooding.¹



Extreme Heat and Increasing Temperatures

IMPACTS

- Heat-related illness and death
- Higher energy demand and utility costs
- Strain on electricity grid
- Increased risk of vector-borne diseases

TRENDS & PROJECTIONS

During the summer of 2022, one of the hottest on record, Groton experienced 21 days with temperatures exceeding 90° F.² This extreme year is predicted to be the norm by 2050.³

By 2050, average year-round temperatures in Connecticut are projected to increase by 5° F (compared to the 1970 to 1999 baseline).⁴



Drought

IMPACTS

- Increased wildfire risk
- Reduced water availability and supply
- Tree, vegetation, and agricultural losses
- Lower groundwater recharge rates

TRENDS & PROJECTIONS

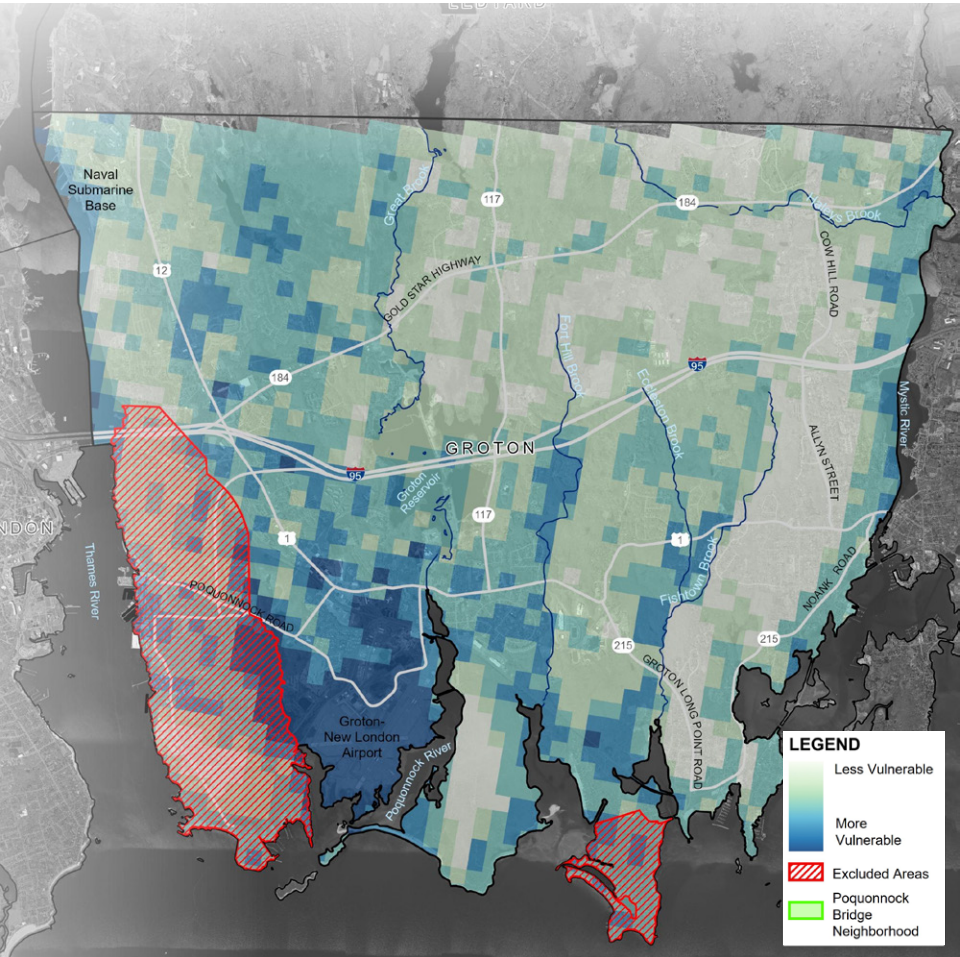
Since 2020, there have been three exceptionally dry periods in Connecticut, including the summer 2022 drought.⁵ Groton is projected to see an increase in both drought frequency and severity in the future, especially during the summers in the mid-century (2040 to 2069).⁶

While rain intensity is expected to increase in Groton over time, the town is still vulnerable to prolonged periods of low precipitation, or drought.

CLIMATE VULNERABILITY ACROSS GROTON

The impacts of climate change are not evenly experienced across the Groton community. The degree to which an area is impacted depends on measures of exposure, sensitivity, and adaptive capacity. By combining detailed data on built, social, and ecological factors across these three components, we can determine overall vulnerability to climate hazards.

The flood vulnerability map on this page identifies areas adjacent to the Mystic (e.g., River Road, Fort Rachel, and Willow Point) and Poquonnock Rivers (e.g., residential areas around the airport) as especially vulnerable to flood exposure. Inland areas along Haley Brook, Fort Hill Brook, and Fishtown Brook, also showed elevated levels of flood vulnerability given their proximity to special flood hazard areas (SFHA).⁷



FLOOD VULNERABILITY IN THE TOWN OF GROTON⁸

THE BENEFITS OF TAKING ACTION, FOR EVERYONE

Climate-Ready Groton seeks to not only mitigate the impacts of climate change, but to also ensure that everyone can access the resources they need to thrive. Actions within this plan intend to provide the following benefits:

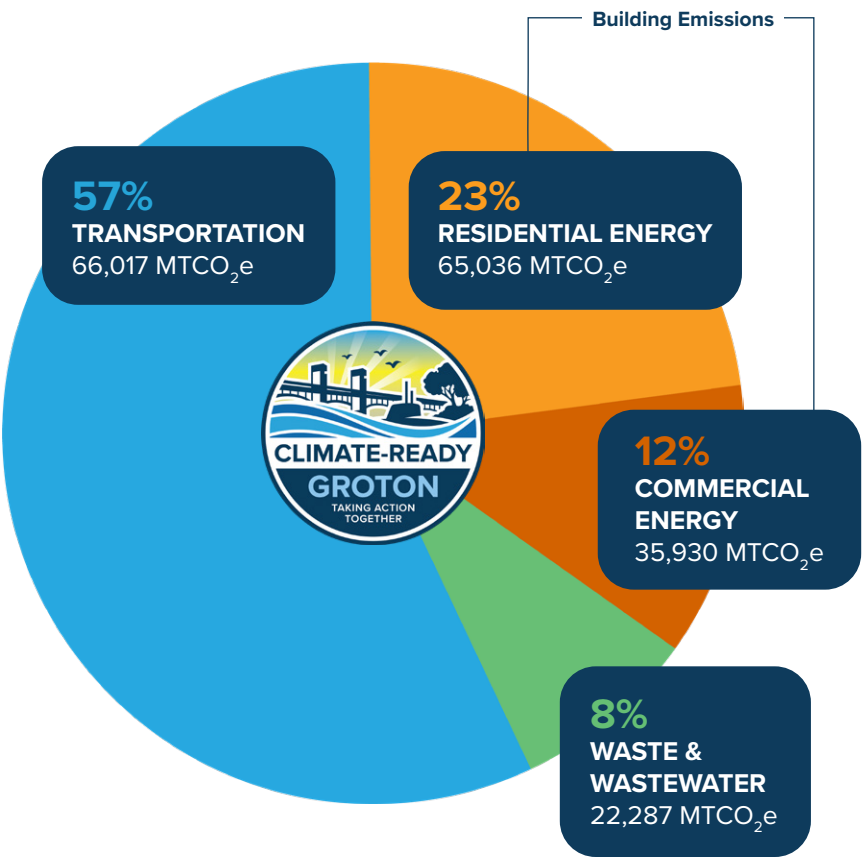
- ✓ Lower energy costs and increase renewable energy options
- ✓ Enhance services and accessibility to resources to prepare for and recover from climate-related events
- ✓ Create more resilient infrastructure, homes, and neighborhoods
- ✓ Increase transportation and mobility options
- ✓ Allow for cleaner air, cleaner water, and healthier ecosystems

Reducing Groton's Climate Pollution

To tackle the challenge of climate change head-on, Groton must do its part to reduce the pollution causing our climate to warm and destabilize. Greenhouse gas (GHG) emissions are released into the atmosphere when fossil fuels like oil and gas are burned to create energy and when waste is incinerated. To create an actionable and data-driven plan, Groton conducted a community-wide GHG inventory to identify the sources of these emissions and the greatest opportunities to reduce them. The Town also examined emissions from municipal operations. This inventory provided the foundation for many of the high-impact strategies and actions in *Climate-Ready Groton*.

In 2024, Groton generated 289,270 metric tons of GHG emissions, measured as metric tons of carbon dioxide equivalent (MTCO₂e). The largest single source of GHGs is attributable to transportation (57%), primarily from private gasoline-powered vehicle trips. Energy used in residential and commercial buildings for lighting, heating, cooling, and powering appliances and devices accounts for the next largest share (35%). Solid waste sent to the Lisbon incineration facility and wastewater processes account for most of the remaining emissions (8%).

GROTON'S 2024 COMMUNITY GHG EMISSIONS BY SECTOR⁹



289,270 TOTAL MTCO₂e

In Groton, GHGs from municipal operations account for less than 2% of all emissions.

Understanding MTCO₂e

Emissions in this plan are reported in MTCO₂e: metric tons of carbon dioxide equivalent, the standard worldwide unit for tracking greenhouse gases.

Why “equivalent”?

Different gases warm the planet differently. Methane, the main component of natural gas, traps about 28 times more heat than carbon dioxide over 100 years; nitrous oxide, largely from fertilizer and industry, traps nearly 300 times more. To compare them fairly, each gas is converted into the amount of carbon dioxide that would cause the same warming.

What does one MTCO₂e look like?

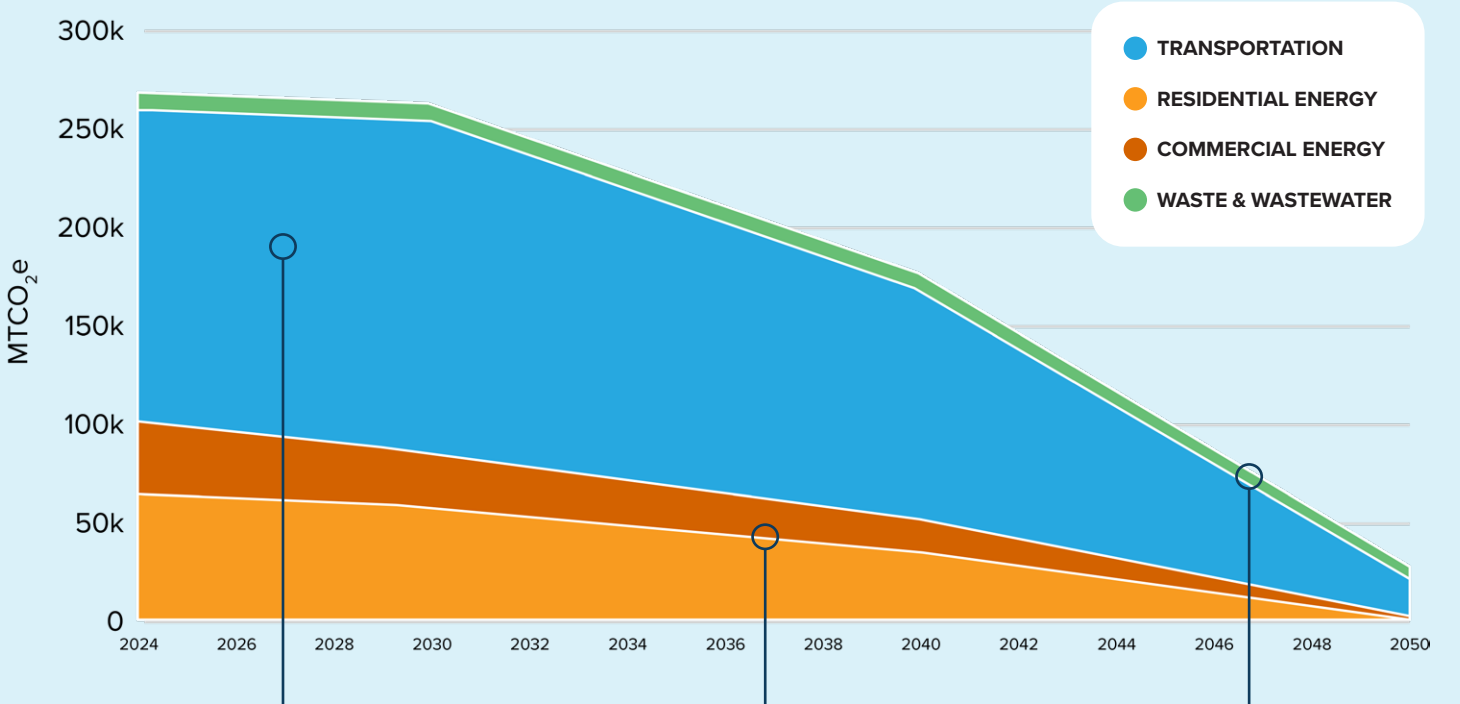
Roughly the climate pollution from driving an average gas car 2,500 miles, or powering a typical home for about six weeks.

Using one unit lets Groton combine emissions from cars, buildings, and landfills into a single number and track whether it is rising or falling over time.

PATHWAYS TO REDUCING EMISSIONS

Groton can reduce GHG emissions by transforming buildings, transportation, waste management, and industrial systems to be as clean and efficient as possible. The strategies outlined in *Climate-Ready Groton* were designed to put Groton on a path to achieve a 90% reduction in GHG emissions by 2050, reducing emissions at a pace that supports the State of Connecticut’s reduction goals. In addition, an overarching strategy to purchase electricity from 100% renewable resources will be required.

GROTON'S PATHWAY TO A 90% EMISSIONS REDUCTION BY 2050¹⁰



Electrify Transportation & Shift to Alternative Modes

To tackle emissions from the transportation sector, Groton will need to shift to alternative modes of transportation including biking, walking, public transit, and electric vehicles (EVs). Vehicle electrification must be accompanied by the shift from private vehicle trips to increased transit use and alternative mobility options to minimize future electricity demands.

Electrify Buildings & Pursue Efficiency

Energy use in buildings accounts for more than one-third of Groton’s GHG emissions. To rapidly reduce emissions, Groton must eliminate the direct use of fossil fuels for heating, cooking, and other uses in both new and existing buildings. All electrification efforts should be accompanied by high efficiency retrofits to minimize the demand for new renewable energy.

Reduce Solid Waste

Between now and 2050, Groton will need to steadily increase waste diversion rates. This means diverting organic waste (e.g., food waste) to compost, reducing the use of plastics and other non-recyclable materials, and preventing as much waste as possible from being incinerated.

Due to the presence of several large industrial energy users in Greater Groton—Pfizer, General Dynamics Electric Boat, and the Naval Submarine Base—and how natural gas data is reported, it was difficult to parse the energy usage that could be attributed to these users versus other commercial entities. Due to these data constraints, demonstrating progress on GHG reductions based on total energy use alone will be challenging. The Town can supplement this by tracking actions taken throughout the community.

Community Priorities & Perspectives

Climate-Ready Groton is a joint effort across Town departments, stakeholder organizations, and residents. Engaging community members in the planning process was critical to developing a plan that reflects the community’s diverse priorities, concerns, and needs.



CLIMATE ACTION QUICK POLLS

The Town conducted four “quick poll” surveys during the planning process to identify community barriers to action and opportunities for impact that helped shape the final plan. In total, these polls collected more than 400 responses from Groton residents.

- 85 responses on the Electric Vehicles Quick Poll
- 89 responses on the Energy & Buildings Quick Poll
- 135 responses on the Extreme Weather & Preparedness Quick Poll
- 104 responses on the Waste Reduction Quick Poll

“It’s worth it to spend the money to continue updating and keep current facilities and resources working and up to code. We pay taxes, let’s use them.”

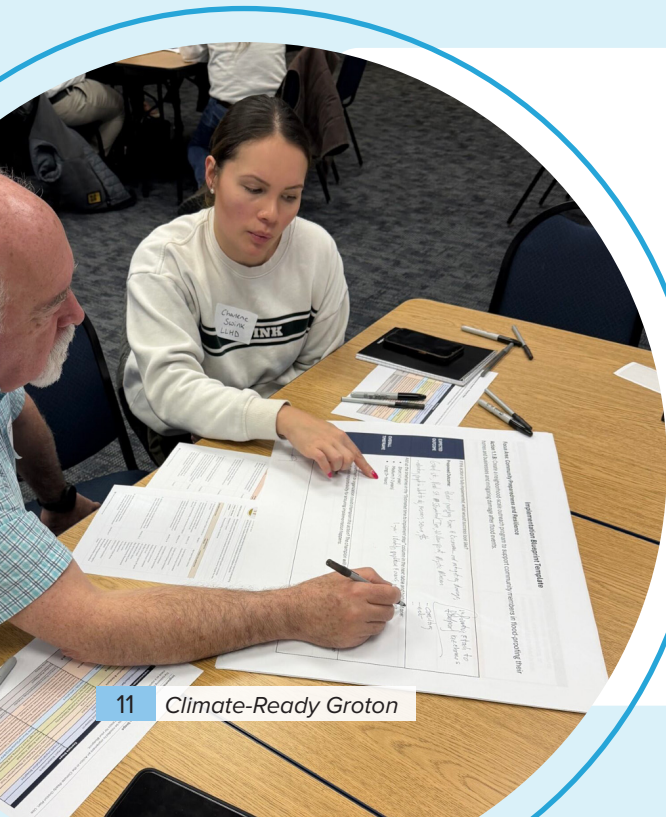
“We need both policies that encourage lower carbon footprints (solar, EVs, heat pumps, public transit), and policies that encourage rapid adaptation to the baked in sea level rise we are going to experience.”

CLIMATE ACTION ADVISORY GROUP

46 Members

The Climate-Ready Groton Advisory Group, made up of Town staff members, residents, and community partners, met three times to shape the plan’s goals, strategies, and actions.

32% of Advisory Group members believe that Groton should aim to become a climate and sustainability leader within the state, while 41% believe Groton should strive to demonstrate leadership across New England.



COMMUNITY EVENTS

The Climate-Ready Groton team hosted and attended 19 community events to hear directly from residents about the issues that matter most to them.



BAGELS FOR RESILIENT GROTON 75+ Participants

Town Staff welcomed residents to Bridge Market and Deli for breakfast and the opportunity to weigh in on draft goals, strategies, and actions.

STUDENT OUTREACH 70 Participants

Two student workshops at Fitch High School and a tabling event at UConn Avery Point asked teens and young adults to consider what a Climate-Ready Groton would look like.



BUMPERS AND BOOKS 100+ Participants

Town staff joined the Groton Public Library’s 10th annual trunk or treat event to talk about how spooky climate change can be.

YOUTH CLIMATE SUMMIT 150 Participants

The Town of Groton supported the Southeastern CT Youth Climate Summit to hear what today’s young leaders hope tomorrow’s climate future will look like.

GROTON EARTH DAY EXPO 250+ Participants

Community members came together to celebrate Earth Day, learn how they can live more sustainably, and share some of the climate hazards they experience in Groton.



PLAN OF CONSERVATION AND DEVELOPMENT (POCD) OPEN HOUSES 50+ Participants

As community members gathered to share their feedback on different sections of the draft POCD plan, Town staff provided space to weigh in on Climate-Ready Groton’s goals, strategies, and actions.



POPSICLES IN THE PARK 25 Participants

Residents of all ages were invited to beat the heat by answering one of the Climate-Ready Groton quick polls in exchange for a popsicle.

CLOTHING SWAP 35 Participants

Residents swapped more than just clothes at Thrive55+. Town staff set up a table to ask participants to swap ideas about how Groton should handle waste.

Action Plan

Through community and stakeholder input and data analysis, the *Climate-Ready Groton* planning process identified goals, strategies, and actions for each of the five focus areas, as well as metrics and targets to measure progress. The sections ahead explore these components in the following format.

Components

VISION
A broad statement illustrating the future state that Groton aims to achieve in each focus area.

WHAT'S INCLUDED
Key topics addressed through the goals, strategies, and actions.

BY THE NUMBERS
Key baseline data that demonstrates where Groton currently stands and progress to date.

TRACKING PROGRESS
Key metrics, baseline data, and 2030, 2040, and 2050 targets that will demonstrate progress on the goals, strategies, and actions.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
--------	----------------------	-------------	-------------	-------------

ACTION TABLE
Summary table of goals, strategies, and actions.

Goal	The desired outcome consistent with the broad vision statement.
Strategy	The general approach used to accomplish a goal.
Action	The specific activity that will be undertaken to execute a strategy.



Buildings & Energy

VISION: Groton runs on clean energy and encourages high-performing, energy-efficient buildings.

- WHAT'S INCLUDED:**
- Energy efficiency
 - Electrification
 - Resilient building design
 - Renewable energy
 - Energy benchmarking and reporting

BY THE NUMBERS

Building energy use is one of Groton’s largest sources of emissions and utility costs. Expanding access to energy efficiency and renewable energy solutions can help lower bills, reduce air pollution, and make homes and businesses healthier and more comfortable year-round.



50 YEARS OLD

The average age of homes in Groton, which means they are ready for energy efficiency and electrification upgrades.¹¹



OVER 30%

of Groton’s households are cost-burdened, meaning they spend more than 30% of their budgets on housing costs.¹²



2x

Rooftop solar could generate 2x the amount of electricity Groton uses today.¹³

TRACKING PROGRESS

The following metrics and targets were identified to help monitor progress toward Groton’s goals. The 2040 Targets were established based on a scenario where Groton is among the top ten communities in Connecticut deploying energy solutions.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
Share of residential buildings electrified (%)	7% ¹⁴ (2025)	10%	45%	100%
Share of commercial buildings electrified (%)	1% ¹⁵ (2025)	5%	45%	100%
Installed solar capacity (MW)	0.1 MW ¹⁶ (2025)	0.9 MW	11 MW	24 MW
Clean energy investment per household (\$/Household (HH))*	\$1,641 / HH ¹⁷ (cumulative from 2012-2025)	\$2,220 / HH	\$4,500 / HH	\$6,000 / HH

*This metric tracks the total clean-energy investment flowing into Groton homes and businesses through the Connecticut Green Bank, measured per household so Groton can be compared with peer communities. A rising number means more residents and businesses are accessing affordable financing to lower their energy bills.



TAKE ACTION

A home energy audit is a smart and easy first step to understand what energy efficiency upgrades are right for your home. Schedule your assessment through Groton Utilities or EnergizeCT today and learn how you could save money on future utility bills.

[LEARN MORE](#)

ACTION TABLE

The *Climate-Ready Groton* planning process identified the following goals, strategies, and actions for Buildings & Energy (BE).

BE Goal 1	Groton's new and existing buildings minimize energy use and greenhouse gas emissions.
BE Strategy 1.1	Support retrofitting existing buildings through collaboration and educational efforts.
BE Action 1.1.A	Create a resource hub aimed at educating and assisting residents and businesses to access Home Energy Solutions Assessments and navigate Groton Utilities and Eversource incentives and rebates for heat pumps, weatherization and other efficiency upgrades.
BE Action 1.1.B	Partner with energy assistance non-profits and programs (e.g., Operation Fuel, Connecticut Energy Assistance Fund, CT Green Bank) to support incentives, energy efficiency, beneficial electrification for high energy burden households.
BE Action 1.1.C	Develop targeted education and support programs to connect small businesses with C-PACE financing and track performance.
BE Strategy 1.2	Optimize municipal facility energy performance.
BE Action 1.2.A	Institutionalize energy benchmarking and reporting for municipal facilities and schools to Town Council and other relevant committees.
BE Action 1.2.B	Incorporate life cycle costs into decision making for energy-related projects (such as solar, microgrid battery storage, etc.) at municipal facilities.
BE Strategy 1.3	Support high-efficiency standards for new construction.
BE Action 1.3.A	Provide local contractors with training and guidance to easily understand and implement the Climate Resilient Energy Code and future updates.
BE Action 1.3.B	Use planning tools like density bonuses to support adoption of beyond-code high performance building standards.
BE Goal 2	Groton develops and supports clean energy projects.
BE Strategy 2.1	Maximize Groton's renewable energy generation and storage capacity.
BE Action 2.1.A	Identify and prioritize potential sites for potential high-impact Community Solar projects with storage components.
BE Action 2.1.B	Develop and launch an outreach campaign for renters and other qualifying residents to subscribe to Utility Community Solar.

C-PACE (Commercial Property Assessed Clean Energy) is a Connecticut Green Bank program that lets owners of commercial, industrial, and multifamily buildings pay for energy efficiency, renewable energy, and resilience upgrades with no money down. Repayment is added to the property tax bill and stays with the building, so if the property is sold, the new owner picks up the remaining payments.



Community Preparedness & Resilience

VISION: Groton promotes the well-being and preparedness of all community members in the face of climate change.

BY THE NUMBERS

Climate change is already affecting daily life in Groton. Strong community preparedness protects people, reduces damage to assets and the environment, improves emergency response, and helps neighborhoods recover faster after extreme weather events.



1 OUT OF 3

Groton households are occupied by residents living alone, who could need additional support during emergencies.¹⁸



20

extreme heat days over 90° F* expected every year in Groton by 2050.¹⁹



4-5x

Increase in heavy precipitation events during winter months expected by late century (2070 to 2099).²⁰

TRACKING PROGRESS

The following metrics and targets were identified to help monitor progress toward Groton’s goals.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
Flood-exposed homes heated with oil (#)	968 ²¹ (2025)	800	400	0
Community members served by a resilience hub (#)	New Metric	Increase		
Community members trained through CERT program (#)	New Metric	Increase		
Share of community members enrolled in CT Alert (%)	New Metric	30%	75%	95%

*An extreme heat day is measured as a day with abnormally high temperatures and humidity that are substantially hotter than the historical average for a specific location and date.

WHAT’S INCLUDED:

- Neighborhood resilience
- Emergency preparedness and response
- Community services and resilience hubs
- Communications and training

ACTION TABLE

The *Climate-Ready Groton* planning process identified the following goals, strategies, and actions for Community Preparedness & Resilience (CPR).

CPR Goal 1	Residents are prepared for and protected from climate impacts.
CPR Strategy 1.1	Leverage climate data and hazard mitigation best practices to guide neighborhood resilience planning.
CPR Action 1.1.A	Prioritize oil transition for homes in flood zones through targeted educational outreach, financial incentives, and greater marketing of electrification options.
CPR Action 1.1.B	Create a neighborhood-scale outreach program to support community members (particularly in environmental justice and other marginalized communities) with flood-proofing their homes and businesses and mitigating damage after flood events.
CPR Action 1.1.C	Work with local partners to expand existing cooling and warming shelters and infrastructure in environmental justice and other marginalized communities to support the development of well-resourced community resilience hubs.
CPR Action 1.1.D	Continue to host community conversations about sea level rise, community preparedness, and options for raising vulnerable infrastructure and managed retreat.
CPR Goal 2	Groton responds rapidly and effectively to climate hazards.
CPR Strategy 2.1	Strengthen emergency response protocols and programs.
CPR Action 2.1.A	Re-establish Community Emergency Response Team (CERT) training to build community capacity for emergency response.
CPR Strategy 2.2	Enhance emergency communications across the community.
CPR Action 2.2.A	Establish an updated communications protocol to expand enrollment in CT Alert, ensure that emergency notifications are sent out in multiple languages and across multiple platforms, and provide clear guidance on emergency response actions.
CPR Action 2.2.B	Establish partnerships with groups like the Connecticut Institute for Resilience & Climate Adaptation (CIRCA) to establish a real-time flood prediction and advanced notification system.
CPR Action 2.2.C	Leverage the Town’s website to develop a virtual “resilience hub” for emergency alerts and to distribute information in preparation for, during, and in recovery of extreme weather and climate events.



TAKE ACTION

Sign up for emergency notifications through CT Alert to stay informed about potential hazards.

SIGN UP

The Community Emergency Response Team (CERT) program trains local volunteers in basic disaster response skills like fire safety, search and rescue, and emergency first aid, so neighbors can help neighbors before professional responders arrive. Sponsored by FEMA and run by local fire departments or emergency management offices, CERT teams are a growing frontline resource during storms, floods, heat waves, and other climate-related emergencies.



Infrastructure & Land Use

VISION: Groton’s infrastructure and land use planning support climate-ready neighborhoods.

- WHAT’S INCLUDED:**
- Infrastructure upgrades for climate hazards
 - Zoning updates for sustainable and resilient development
 - Stormwater management
 - Green infrastructure

BY THE NUMBERS

Smart community planning can help prevent flooding, reduce heat risks, and guide sustainable growth. Implementing climate-ready infrastructure protects homes and properties, enhances public safety, and creates more stable neighborhoods.



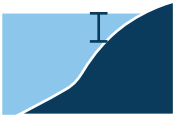
2,600

catch basins for stormwater run-off are maintained by Groton’s Public Works Division.²²



2%

Groton has a goal of reducing impervious surfaces by 2% (about 62 acres) across the community to reduce flood risk.²³



20 inches

of sea level rise expected by 2050.²⁴

TRACKING PROGRESS

The following metrics and targets were identified to help monitor progress toward Groton’s goals.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
Share of critical assets upgraded for inundation risk (%)	New Metric	Upgrade 100% of critical assets by 2040.		
Green infrastructure projects installed (#)	New Metric	Increase		
MyCoast Users (#)	New Metric	Increase		



TAKE ACTION

Join the movement to support local planning, increase awareness, and build a stronger, more resilient shoreline for all! Upload your photos of high tides, flooding, and storm damage to the MyCoast app to help create an important record of how your community experiences coastal flooding and storm events.

GET STARTED

ACTION TABLE

The *Climate-Ready Groton* planning process identified the following goals, strategies, and actions for Infrastructure & Land Use (ILU).

ILU Goal 1	Groton’s infrastructure is climate-ready and flood-resilient.
ILU Strategy 1.1	Manage stormwater and wastewater efficiently and sustainably.
ILU Action 1.1.A	Develop a plan to expand implementation of green infrastructure that is inclusive of a job training program to ensure a steady pipeline of skilled workers capable of installing and maintaining green infrastructure projects.
ILU Action 1.1.B	Conduct a comprehensive analysis of Poquonnock Bridge’s stormwater system and implement infrastructure upgrades to alleviate persistent neighborhood flooding.
ILU Action 1.1.C	Advance priority projects identified through the Resilience Sub-Assessment.
ILU Action 1.1.D	Evaluate high-priority pump stations to assess flood impacts on surrounding areas, including key access roads, to inform floodproofing measures.
ILU Goal 2	Groton makes strategic land use decisions to prioritize sustainable growth.
ILU Strategy 2.1	Update zoning regulations to support attainable and climate-ready development.
ILU Action 2.1.A	Incorporate heat mitigation measures into design guidelines and zoning review processes.
ILU Action 2.1.B	Establish tiered flood resilience overlay districts that incorporate future climate projections such as those modeled by CIRCA.

ILU Action 1.1.C: Resilience Sub-Assessment

During the planning process for *Climate-Ready Groton*, the Town identified assets and buildings that are vulnerable to climate impacts such as flooding. Five locations were prioritized for a Resilience Sub-Assessment, which identified specific upgrades and retrofits that could be implemented to reduce risk and enhance resident safety. For example, the Groton Regency Nursing Home was prioritized for an assessment because older adults are more vulnerable to heat waves. Mystic River Magnet School was similarly identified because flooding on Fishtown Road can limit access to the site.



Natural Resources & Consumption

VISION: Groton protects natural resources and minimizes waste for future generations.

BY THE NUMBERS

Healthy natural systems clean our air and water, reduce flooding and heat, support wildlife, and improve quality of life. Reducing waste and increasing composting also saves resources and reduces Groton’s greenhouse gas emissions.



30%

of Groton is protected or preserved open space.²⁵



1,290 TONS

estimation of organic waste will be diverted from Groton through SCRRRA's forthcoming compost facility.²⁶



60%

of Groton residents are served by public service curbside collection (provided by the Town or Fire District).²⁷

TRACKING PROGRESS

The following metrics and targets were identified to help monitor progress toward Groton’s goals.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
Average tree canopy coverage (%)	67% ²⁸ (2020)	Maintain current canopy coverage rate of 67%, at a minimum.		
Public tree stocking rate (%)	44% ²⁹ (2024)	50%	80%	85%
Food recovered or diverted (tons)	<i>New Metric</i>	1,200 tons	1,500 tons	1,800 tons



TAKE ACTION

Reduce food waste and emissions by composting at home. Stay tuned for curbside pick-up options.

GET STARTED

WHAT'S INCLUDED:

- Tree canopy management
- Healthy waterways
- Waste management and diversion
- Food recovery and composting

ACTION TABLE

The *Climate-Ready Groton* planning process identified the following goals, strategies, and actions for Natural Resources & Consumption (NRC).

NRC Goal 1	Natural resources are protected and managed to enhance ecosystem services and community resilience.
NRC Strategy 1.1	Protect and restore natural resources across the community.
NRC Action 1.1.A	Convene a resilient water ecosystems working group to investigate opportunities to enhance coastal, marsh, and wetland restoration.
NRC Strategy 1.2	Expand and maintain a healthy tree canopy, in alignment with Groton’s Tree Management Plan.
NRC Action 1.2.A	Prioritize diverse, native, and adaptive tree species for new street plantings to increase canopy resilience to disease, pests, and heat.
NRC Action 1.2.B	Prioritize canopy management and pruning for high-risk trees in high-occupancy areas to prevent clearance issues for roadways and homes.
NRC Action 1.2.C	Equitably distribute new street trees across the community, prioritizing areas with low tree cover and/or high heat indexes.
NRC Action 1.2.D	Expand community gardens, urban plantings, and other small scale projects throughout the community.
NRC Goal 2	Groton embraces a circular economy and minimizes waste.
NRC Strategy 2.1	Streamline waste management across the community.
NRC Action 2.1.A	Host roundtable meetings with all parties responsible for waste management across the Fire Districts to share information, establish more consistent processes, and discuss opportunities for cost savings and consolidation.
NRC Strategy 2.2	Support waste diversion programs for residents and businesses.
NRC Action 2.2.A	Design and launch a communications campaign to promote SCRRRA's new composting facility and opportunities for homeowners and businesses to participate in curbside and drop-off composting.
NRC Action 2.2.B	Partner with SCRRRA to establish a bottle redemption center.
NRC Action 2.2.C	Connect local restaurants with existing resources to reduce food waste, such as the Center for EcoTechnology, Too Good to Go, and the Knights of Columbus food recovery program.

Tree Planting Stocking Rate: The share of Groton’s available public tree planting locations (street tree wells, parks, and other town property) that currently hold a healthy, living tree. A higher rate means the town is making fuller use of its canopy potential; a lower rate signals room to plant more.



Transportation & Mobility

VISION: Groton accelerates the transition to zero-emission vehicles and low-carbon mobility options.

WHAT'S INCLUDED:

- Zero-emission vehicles and charging infrastructure
- Public transit access and improvements
- Active transportation, such as walking and biking

BY THE NUMBERS

Transportation is Groton’s largest source of greenhouse gas (GHG) emissions and contributes to household expenses. Expanding clean and safe transportation options beyond gas-powered, single-occupancy vehicles improves air quality, accessibility, public health, and community connectivity.



204 MILLION

vehicle miles traveled (VMT) by Groton residents every year.³⁰



98%

of those miles are driven gasoline powered passenger and light duty truck vehicles.³¹



71%

of Groton commuters drive in their car alone.³²

TRACKING PROGRESS

The following metrics and targets were identified to help monitor progress toward Groton’s goals.

METRIC	BASELINE DATA (YEAR)	2030 TARGET	2040 TARGET	2050 TARGET
Share of passenger vehicles electrified (%)	2.06% ³³ (2025)	10%	52%	100%
Share of municipal fleet electrified (%)	1% ³⁴ (2025)	10%	40%	75%
Miles of new protected biking infrastructure installed (#)	New Metric	7	36	62



TAKE ACTION

See what incentives and rebates you may qualify for when you purchase an electric vehicle.

GET STARTED

ACTION TABLE

The *Climate-Ready Groton* planning process identified the following goals, strategies, and actions for Transportation & Mobility (TM).

TM Goal 1	Groton models clean transportation options.
TM Strategy 1.1	Transition the municipal fleet to zero-emission vehicles.
TM Action 1.1.A	Create a municipal vehicle inventory and transition plan to prioritize zero-emissions vehicles and fewer vehicles overall in the Town’s fleet.
TM Action 1.1.B	Establish a reservation system or carpool program for Town staff and departments to share fleet vehicles.
TM Action 1.1.C	Partner with neighboring school districts to apply for CT Green Bank funding to purchase EV school buses that could be shared.
TM Strategy 1.2	Remove barriers for residents to purchase or lease electric vehicles.
TM Action 1.2.A	Publicize the state’s existing Connecticut Hydrogen and Electric Automobile Purchase Rebate (CHEAPR) to encourage community members to take advantage of financial incentives.
TM Action 1.2.B	Identify potential locations for additional publicly accessible EV charging stations and opportunities to incentivize property owners to install them.
TM Goal 2	Community members have access to efficient, safe, and sustainable transportation modes.
TM Strategy 2.1	Reduce single-occupancy vehicle trips by encouraging higher residential densities in areas with existing or planned public transportation.
TM Action 2.1.A	Partner with Southeast Area Transit District (SEAT) to publicize their HOP on-demand shuttle service and explore opportunities for expansion.
TM Action 2.1.B	Increase density allowances in areas with existing or planned public transportation options.
TM Strategy 2.2	Advance active modes of transportation, in alignment with Groton’s Complete Streets Bicycle and Pedestrian Masterplan.
TM Action 2.2.A	Install protected bike lanes and safe biking infrastructure in priority locations.
TM Action 2.2.B	Expand sidewalks and crosswalks between residential neighborhoods, green space, and daily amenities.

Creating a climate-ready future will take all of us. To build a safer and stronger future for everyone in our community, let's *take action together.*

Implementing the actions in *Climate-Ready Groton* will lay the groundwork to reduce GHG emissions between now and 2050 and prepare community members for the future impacts of climate change. Given how quickly technology is evolving and our climate is changing, Groton will continuously evaluate the actions in the plan and adjust them as needed. To support with prioritizing actions, the Town will identify each action as a short, medium, or long term goal and pursue funding opportunities where available. The Town will produce yearly progress reports and update the plan every five years.

Acknowledgments

A huge thank you to the Town of Groton leadership, staff, and community partners who shared their time, effort, and dedication to support this process.

CLIMATE ACTION ADVISORY GROUP

TOWN OF GROTON REPRESENTATIVES

- Conservation Commission
- Economic Development Commission
- Emergency Management
- Fleet and Facility Management
- Groton Public Library
- Human Services
- Planning and Development
- Police
- Public Works
- Purchasing Division
- Stormwater Management
- Town Council

REGIONAL AND COMMUNITY PARTNERS

- Avalonia Land Conservancy
- CT Sea Grant
- Fitch High School
- Groton Housing Authority
- Groton Long Point
- Groton Open Space Association
- Groton Residents and Business Owners
- Groton Utilities
- Ledge Light Health District
- Poquonnock Bridge Fire Department
- Southeastern Connecticut Regional Resource Recovery Authority
- SeCTer
- Southeastern CT Council of Governments
- SUBASE New London
- Thames Valley Council for Community Action



For more information and resources related to *Climate-Ready Groton*, visit the Greater Groton website:

www.greatergroton.com/groton-2035

Endnotes

1 Connecticut Institute for Resilience and Climate Adaptation (CIRCA), [Connecticut Physical Climate Science Assessment Report](#) (2019).

2 Resilient Land and Water, LLC, Town of Groton Annex Document, Southeastern Connecticut Council of Governments Multi-Jurisdictional Hazard Mitigation and Climate Adaptation Plan Update (March 2023).

3 Town of Groton, [Planning for Extreme Heat in Groton, Connecticut](#) (2023).

4 Governor’s Council on Climate Change, [Taking Action on Climate Change and Building a More Resilient Connecticut for All, Phase 1 Report](#) (2021).

5 National Integrated Drought Information System, [Connecticut Data](#) (2025).

6 Connecticut Institute for Resilience and Climate Adaptation (CIRCA), [Connecticut Physical Climate Science Assessment Report](#) (2019).

7 Fuss and O’Neill, Town of Groton: Community-Wide Vulnerability Assessment (2026).

8 Fuss and O’Neill, Town of Groton: Community-Wide Vulnerability Assessment (2026).

9 Kim Lundgren Associates, Town of Groton: 2024 Community Greenhouse Gas Inventory (2025).

10 Kim Lundgren Associates, Town of Groton: GHG Pathways Analysis (2025).

11 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

12 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

13 Google Project Sunroof, Data Explorer (2026).

14 Town of Groton, Groton Assessor’s Database (2025).

15 Town of Groton, Groton Assessor’s Database (2025).

16 Energize Connecticut, [Solar Installations Dashboard](#) (2025).

17 Connecticut Green Bank, [Mapping Analysis of Your Area \(MAYA\) Tool, Town of Groton, total clean energy investment per household](#) (cumulative through 2025).

18 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

19 Town of Groton, [Planning for Extreme Heat in Groton, Connecticut](#) (2023).

20 Connecticut Institute for Resilience and Climate Adaptation (CIRCA), [Connecticut Physical Climate Science Assessment Report](#) (2019).

21 Connecticut Department of Energy and Environmental Protection, [Connecticut Hurricane Surge Map](#), (2025). Combined with Groton’s Assessor Database.

22 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

23 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

24 Connecticut Institute for Resilience and Climate Adaptation (CIRCA), [Connecticut Physical Climate Science Assessment Report](#) (2019).

25 Town of Groton, Groton 2035: Plan of Conservation and Development (2026).

26 Calculated based on the population weighted share of communities that will be served by SCRRRA’s facility.

27 Direct communication from SCRRRA (2026).

28 Town of Groton. [Tree Management Plan](#) (2024).

29 Town of Groton. [Tree Management Plan](#) (2024).

30 Kim Lundgren Associates, Town of Groton: 2024 Community Greenhouse Gas Inventory (2025).

31 Kim Lundgren Associates, Town of Groton: 2024 Community Greenhouse Gas Inventory (2025).

32 American Community Survey, Commute Mode (2018-2022 5-Year Estimates).

33 Atlas Public Policy, [EvaluateCT Dashboard](#) (2025).

34 Town of Groton, Fleet Records (2025).





Connect With Us

groton-ct.gov

greatergroton.com

 [@resilientgroton](https://www.instagram.com/resilientgroton)

