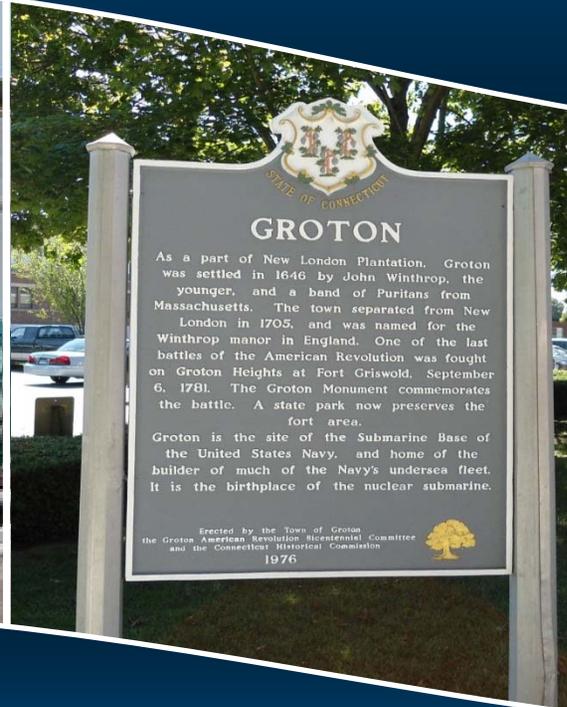


2013 Town of Groton Plan of Conservation & Development & Municipal Coastal Program *Energy & Sustainability*



January 16, 2014

What is Sustainability?

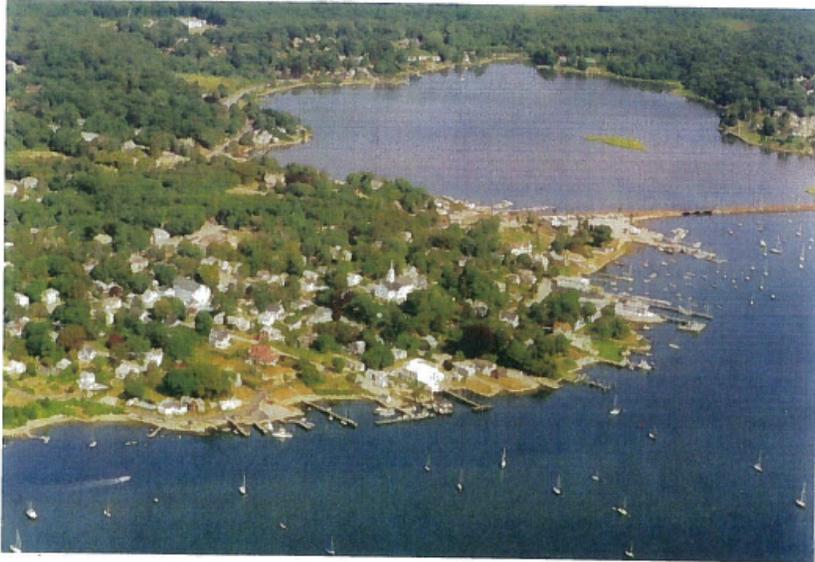
*“Sustainability is a balanced approach that considers people, planet, and prosperity. By ‘people,’ it means **community well-being and equity**. ‘Planet’ refers to the **environment and resource conservation**. And ‘prosperity’ means **economic vitality**. In the long run, sustainability means adapting human activities to the constraints and opportunities of the natural system we need to support life.*

Sustainability is a process of continuous, ongoing improvement, and a realignment of community goals and practices to grow in a more responsible and resilient manner.”

*“Embracing Sustainability in Community Plans,” Benjamin A. Herman, *Planning*, April 2010.*

Importance to Groton

Preparing for Climate Change in Groton, Connecticut



A Report to the Town of Groton, Connecticut from
ICLEI-Local Governments for Sustainability &
Connecticut Department of Environmental Protection
December 2010

This project was generously funded by the Climate Ready Estuaries program of the U.S. Environmental Protection Agency

- **Sustainability is now a required section of all POCDs.**
- **Groton has already shown that sustainability is a priority for the Town through committees, reports and studies, and local groups.**
- **As a coastal town, likely to feel impacts from sea rise from climate change (as discussed in Municipal Coastal Program).**
- **Public & private economic benefits from energy savings and waste reduction, among others.**

Collaborative Effort

- **Government policies, business practices, and individual consumer habits all impact sustainability – Groton needs a collaborative and comprehensive approach.**
- **Connections with other government bodies, non-profit organizations, utilities, private sector businesses, and volunteer groups will be crucial in achieving goals.**
- **The Town can build on existing assets within the community to leverage tight municipal budgets.**



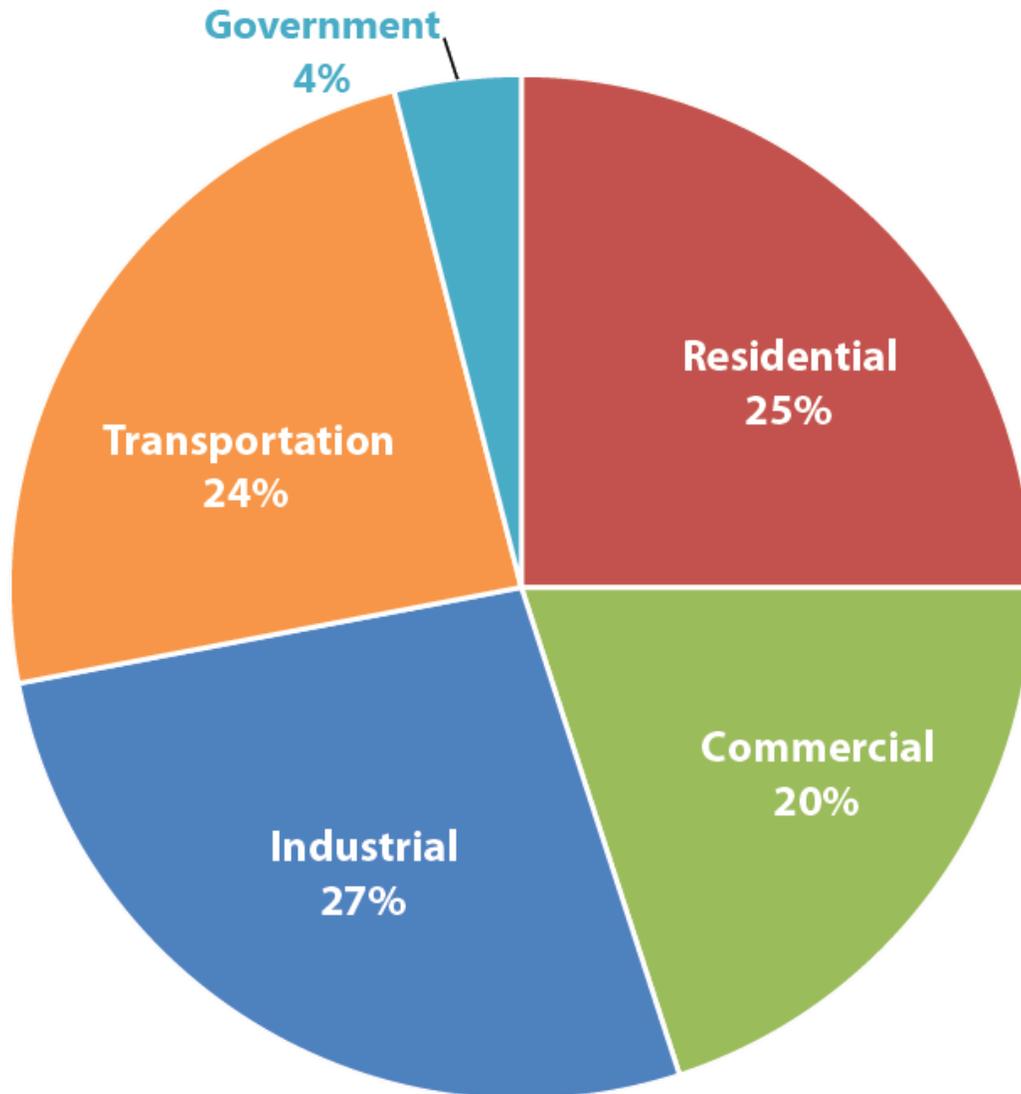
Student of the Ella T. Grasso Technical School in the carpentry program. The Town should support student efforts to start green construction and retrofit companies.

A smartphone app developed by Connecticut Sea Grant allows residents to plant their own rain garden.



Energy & Sustainability

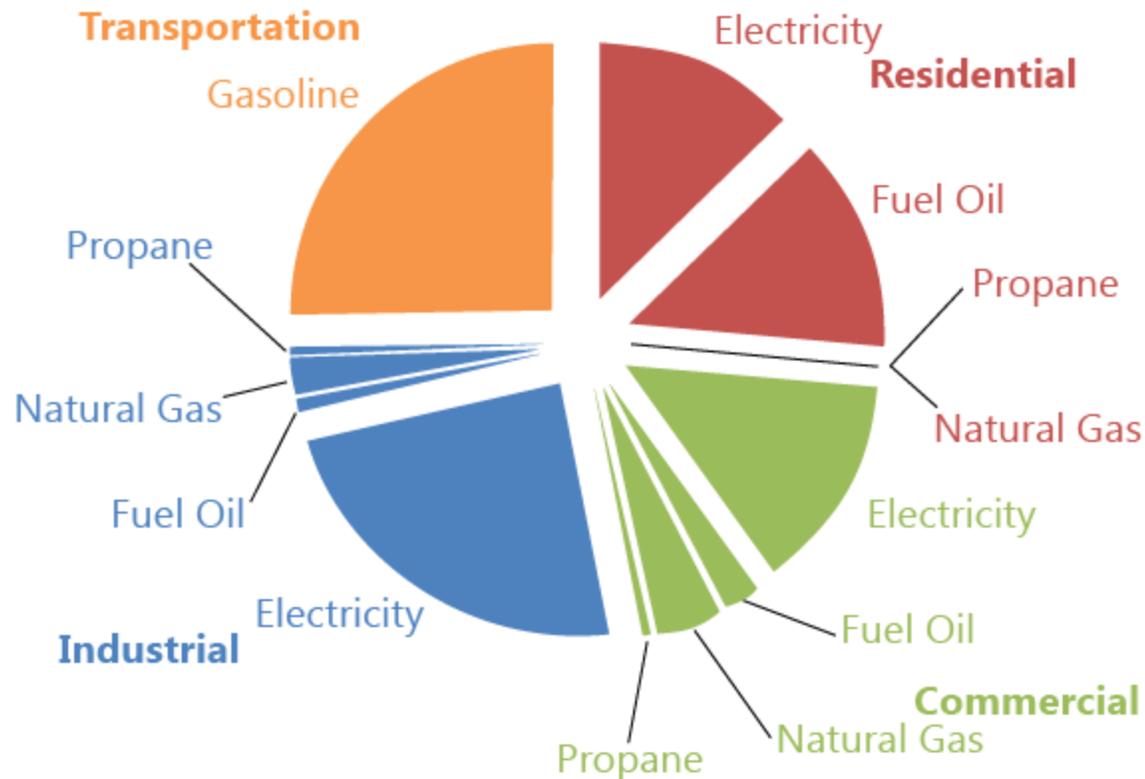
Total CO₂e Emissions by Sector



- Emissions from CO₂ and other greenhouse gases contribute to climate change, as well as air pollution.
- Reduction of emissions, through energy conservation and efficiencies as well as land use, can help Groton become more sustainable.

Community Emissions

Community Equivalent CO₂ Emissions
96% of Town Total

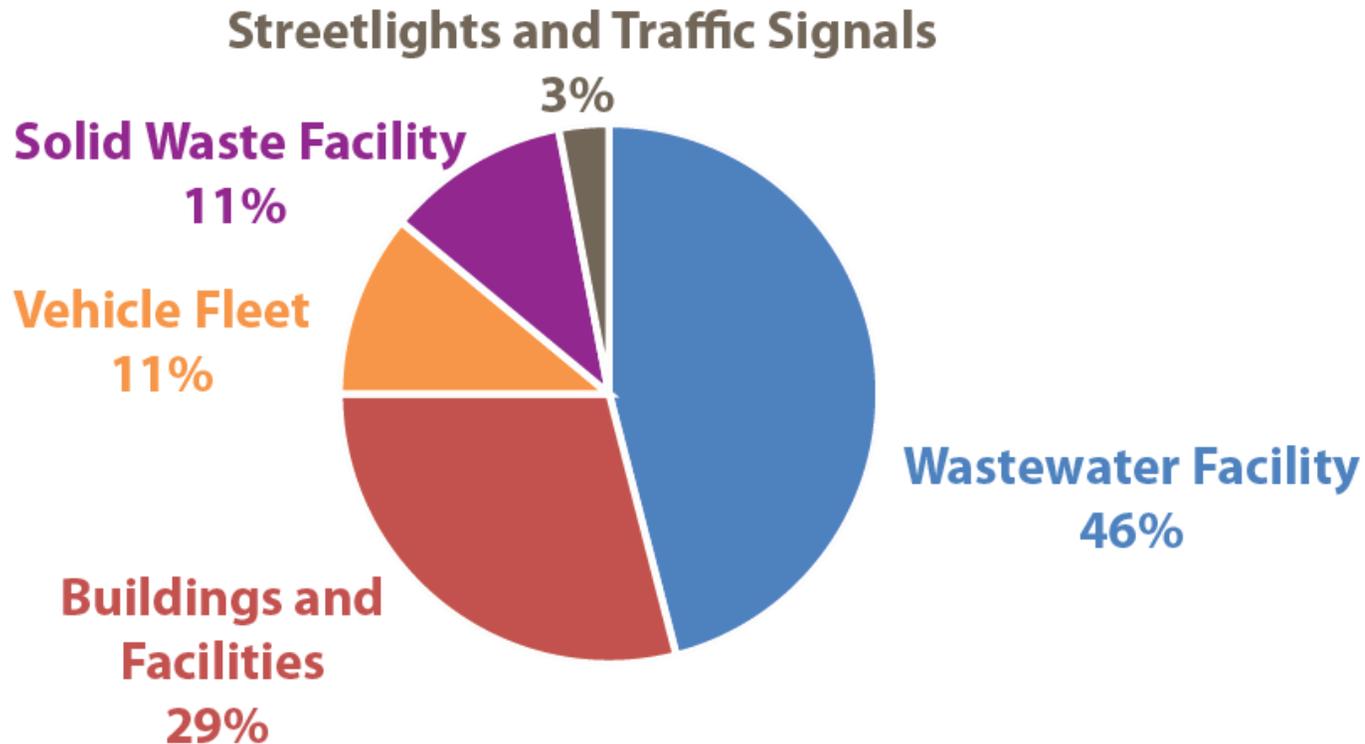


Source: Greenhouse Gas Emissions Inventory, FYE 2009

Groton will need to coordinate reductions across residential, commercial, and industrial uses, as well as transportation to make Town-wide emissions reductions.

Government Emissions

**Government Equivalent CO₂ Emissions
4% of Town Total**



Source: Greenhouse Gas Emissions Inventory, FYE 2009

Town government emissions are only 4% of the total, but the Town is in a position to lead by example for the community in reduction measures.

Energy & the Built Environment

	Achievements	Sample Goals and Strategies
Energy & the Built Environment	<ul style="list-style-type: none">• Energy Audit & Energy Action Plan• Energy Efficiency & Conservation Commission• Town operations generate only 4% of total CO₂ emissions	<ul style="list-style-type: none">• Follow Energy Action Plan recommendations to pursue renewable energy electricity infrastructure upgrades• Follow Energy Action Plan recommendations to improve energy efficiencies through capital improvements• Help commercial and residential properties qualify for Connecticut Clean Energy Fund's On-Site Distributed Generation grants to pay for renewable energy systems

Low Impact Development & Design

	Achievements	Sample Goals and Strategies
Low Impact Development & Design	<ul style="list-style-type: none">• Villages in Town such as Mystic and Noank are "node" type developments that are easier to walk or bike	<ul style="list-style-type: none">• Strengthen and build upon existing node developments as a denser, walkable alternative to "strip" type development• Require or encourage sustainability certifications for larger developments, and green building guidelines for all new development• Develop sustainable retrofits to existing buildings as an economic driver• Promote stormwater infiltration

Transportation

	Achievements	Sample Goals and Strategies
Transportation	<ul style="list-style-type: none">• 2014 Capital Improvements Plan includes a new multi-purpose path along Crystal Lake Road• Public transit available through South East Area Transit• Town has already purchased 22 hybrid vehicles for the Town fleet	<ul style="list-style-type: none">• Continue to pursue new sidewalks and bike trails to increase walkability in Groton, such as through a Safe Routes to School grant• As funds are available, pursue expanded SEAT service and a commuter rail stop in Town• Conduct a use survey of Town vehicles to determine where further efficiencies can be found• Partner with area businesses to provide employer incentives for alternative commuting modes, such as car-pooling or biking• Explore opportunities for car sharing or bike sharing

Waste Reduction

	Achievements	Sample Goals and Strategies
Waste Reduction	<ul style="list-style-type: none">• Collected waste is shipped to a waste-to-energy facility• Town operates a leaf composting facility and reuses some organic waste	<ul style="list-style-type: none">• Groton has filled and closed three landfills - focus on reducing waste community-wide• Pilot small projects to reduce, reuse, and recycle throughout the Town with community partners

Natural Environment

	Achievements	Sample Goals and Strategies
Natural Environment	<ul style="list-style-type: none"> • Completion of Climate Change Sustainable Community Report • Trail, open space, and parks improvements already included in 2014 Capital Improvements Budget • Recent Parks and Recreation Master Plan, 2009 • Tree City USA Community designation for the past 17 years 	<ul style="list-style-type: none"> • Include recommendations for Climate Change report into Town plans • Continue to increase green cover and open space as well as protect current forest, park, and wetland areas • Continue to follow Parks and Recreation Master Plan recommendations • Create a tree inventory of current Town-owned trees to use as a basis for a future planting plan

Water Resources

	Achievements	Sample Goals and Strategies
Water Resources	<ul style="list-style-type: none">• 2008 Drinking Water Quality Management Plan• Groton Stormwater Management Plan	<ul style="list-style-type: none">• Continue to follow regional watershed management best practices• Promote groundwater recharge through rain gardens and other practices

Environmental Health

	Achievements	Sample Goals and Strategies
Environmental Health	<ul style="list-style-type: none">• Ledge Light Health District serves the Groton area to "prevent disease, illness, and injury; to protect and nurture our environment; and to promote improved health and prosperity for all residents."	<ul style="list-style-type: none">• Water quality: Follow recommendations in the 2008 Drinking Water Quality Management Plan; promote chemical-free gardening, low-impact development practices, and stormwater management to protect water quality• Air quality: Continue to reduce CO2 emissions, as well as planting more trees to improve air quality• Public Health: Create public health metrics; expand public transit schedules; and expand the Groton Community Garden

Questions?

