



TOWN OF YARMOUTH
**CLIMATE ACTION
PLAN**

Executive Summary

The climate crisis presents an opportunity for individuals, businesses, and community leadership to shape our collective future. In many communities around the world, local governments are leading the way to address the impacts from climate change such as rising seas, severe storms, and intensifying public health hazards. Municipalities are uniquely positioned to empower residents and businesses to reduce emissions while adapting policies and services to prepare the community for a healthy future.

If we choose not to make critical investments in climate solutions, we will face extensive personal, communal, and environmental costs. As we write this plan in 2023, both the federal government and the state of Maine are incentivizing and funding actions so towns and cities can play a role in achieving state-wide and national climate goals.

NOW IS THE TIME TO ACT, AND THE TOWN OF YARMOUTH IS READY TO LEAD.

OUR BOLD GOALS

In 2022, following a groundswell of rigorous and inspiring advocacy by local youth activists, Yarmouth Town Council endorsed a Climate Emergency Resolution that set bold targets to reduce emissions and prepare for climate impacts. In this Resolution the Council called for the development of an action plan to guide these critical endeavors. After a year of community engagement and technical analysis, the Yarmouth Climate Action Task Force presents this Plan as an actionable roadmap to help reduce our contribution to climate change and lay the foundation for a healthy and sustainable future.

“Town of Yarmouth commits to take prompt actions, while recognizing that significant commitment, including regulatory, fiscal and time, is needed to slow and eventually halt the local contribution to global climate change and the associated negative ecological, economic, social, and public health crises.”

- Climate Emergency Resolution, February 2022

The Climate Resolution set bold goals for reducing greenhouse gas emissions (GHGs) from municipal operations and for the broader community. The purpose of this document is to lay out the first steps towards reaching these targets.



2030

**NET ZERO
TOWN AND SCHOOL OPERATIONS**
80% REDUCTION OF COMMUNITY
EMISSIONS



2050

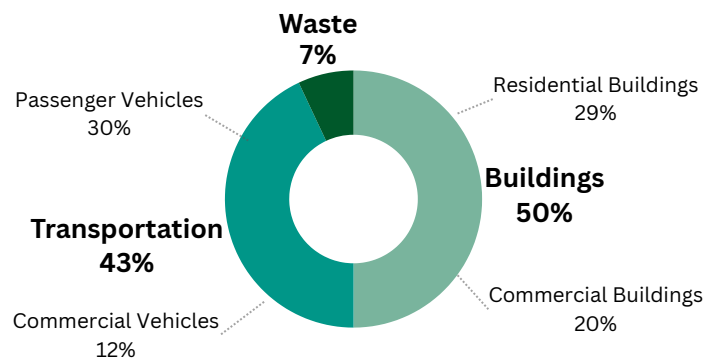
**NET ZERO
COMMUNITY**

The Resolution also highlights the need for sustained and meaningful community engagement - bringing in many voices to develop and implement solutions that keep us safe, protect our environment, advance affordability and accessibility, and reduce emissions.

WHERE ARE WE NOW?

OUR CONTRIBUTION

The first step in tackling our emissions is knowing where they come from. Based on currently available data and methods, an inventory of Yarmouth's greenhouse gas emissions for the year 2019 models that our community contributed a total of 99,697 metric tons of carbon dioxide equivalent (MTCO₂e).



Most of our emissions come from buildings (50%) and transportation (43%), with a smaller amount from processing waste (7%). Municipal and school operations account for around 1% each of total community emissions.

This plan identifies ways we can invest resources and leverage opportunities that make the biggest impact in reducing emissions, such as minimizing fossil fuels used for heating and transportation.

OUR VULNERABILITY

The burden of climate change will not be felt equally across the community. People with existing social vulnerabilities, such as senior citizens, families managing disabilities, or cost-burdened households, will be disproportionately impacted by climate hazards and climate-related health risks. Based on an assessment of the people, places, and systems in Yarmouth that could be most at risk from the intensifying impacts of a changing climate, the following conditions stood out:



**38% OF RESIDENTS
ARE COST BURDENED**



**HIGH PERCENT OF
OLDER BUILDING STOCK**



**25% OF RESIDENTS OVER
65 ARE LIVING ALONE**

There are three priority areas to prepare Yarmouth for climate impacts:

- Maintaining access to critical infrastructure and community services during storms
- Expanding health services for vulnerable populations, especially for extreme heat
- Conserving land and protecting natural resources

This Plan includes ways we can protect at-risk people and places.

GOALS AND STRATEGIES

The technical assessments of emissions and vulnerability, community dialogue, and stakeholder input helped shape this Plan. There are three main focus areas that contain associated goals, strategies, and actions. On the following pages each goal and strategy is listed in tables that note how each relates to our GHG targets, and whether the strategy primarily supports efforts to reduce emissions, store carbon, or support adaptation to climate impacts.

Actions under each strategy are not included in this Executive Summary, but are detailed in the full Plan document.

**Goals, strategies, and actions fall into the following
three focus areas**

DURABLE BUILT ENVIRONMENT*

Transportation and Land Use
Buildings and Renewable Energy
Circular Economy

THRIVING NATURAL ENVIRONMENT

CONNECTED AND SAFE COMMUNITY

**Since the focus area of Durable Built Environment has more content than the other focus areas, it is broken up into three sub-categories with distinct goals, strategies, and actions.*

DURABLE BUILT ENVIRONMENT

In order to ensure a resilient future for our town, we must adopt public infrastructure and building practices that are responsive to the impacts of climate change. Over the coming years toward 2030, Yarmouth will put a strong focus on reducing emissions from both new and existing buildings, infrastructure, and vehicles while laying the groundwork for longer-term investments that allow the town to manage costs as our context shifts over time. In the future, we envision a community where our built environment works in harmony with the natural environment, facilitates sustainable lifestyles for residents and local businesses and is both stable and adaptable in the face of the changing climate.

TRANSPORTATION AND LAND USE

Transportation accounts for 43% of Yarmouth's emissions. To reduce this in line with the 2030 goals, we need to move on two fronts: reduce vehicle miles travelled (by making it easier for people to walk, bike, and take public transit) and transition vehicles to zero emissions. Forward-thinking land use policies and development practices will balance the needs of our growing community and minimize how our built environment contributes to climate change over the long term.

Transportation doesn't rely on fossil fuels

GOAL 1: Support the community to electrify transportation by 2050	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
1.1 Accelerate electric vehicle adoption by residents and businesses	X	X	X		
1.2 Electrify the municipal fleet	X		X		

Yarmouth makes it easy to get around without a car

GOAL 2: Reduce driving by facilitating biking, walking, and public transit	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
2.1 Expand infrastructure for accessible and safe walking, biking, and other active transportation		X	X		X
2.2 Build out transit-oriented infrastructure to increase public transit use		X	X		X

Land use patterns prioritize natural and social connections

GOAL 3: Adopt land use policies to mitigate and adapt to climate change	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
3.1 Strengthen policies and enforcement to promote sustainable, resilient, and accessible land use practices		X	X	X	X

HEALTHY BUILDINGS AND RENEWABLE ENERGY

Buildings currently account for 50% of Yarmouth's emissions. To reduce this in line with the 2030 goals, we need to update existing buildings so that they are energy efficient, powered, heated and cooled with clean energy, and resilient to heavier storms, potential flooding, and bigger temperature swings.

Buildings are comfortable, efficient, and decarbonized

GOAL 4: Enable municipal, commercial, and residential buildings to be decarbonized and adaptable to climate change by 2050, with new construction meeting highest building standards from 2030 onwards.

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
4.1 Actively promote weatherization, efficiency, electrification, and other emission-reducing upgrades in existing buildings	X	X	X		
4.2 Require new construction and major renovations to meet the highest standards for efficiency, carbon neutrality, and climate resilience		X	X	X	X
4.3 Adapt municipal and school buildings to climate resilient, zero emission facilities	X		X		X

Energy is renewable and we advocate for a resilient and affordable regional grid

GOAL 5: Meet 100% of electricity needs with renewable energy by 2030

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
5.1 Foster development of reliable local renewable energy systems		X	X		X
5.2 Reduce barriers to implementing renewable energy	X		X		
5.3 Require new construction to have capacity for clean energy		X	X		
5.4 Pursue 100% renewable energy reliance for government operations	X		X		

CIRCULAR ECONOMY

Waste currently contributes 7% of Yarmouth's total emissions. Although this is low, we acknowledge that our accounting does not include the upstream impacts of waste: emissions created when products are made, transported, and stored.

If Yarmouth can create a more circular economy by 2050, we will reduce direct emissions from town waste and also minimize emissions from the whole lifecycle of everyday items we use - from furniture to food to school supplies.

Community manages resources efficiently and strives for a circular economy

GOAL 6: Reduce community waste	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
6.1 Minimize single-use waste		X	X		
6.2 Promote a circular resource sharing economy		X	X		X
6.3 Expand reuse, recycling and composting infrastructure, services, and education		X	X		
6.4 Reduce waste from Municipal operations and prioritize sustainable consumption	X		X		

THRIVING NATURAL ENVIRONMENT

Our natural environment is threatened by changing climate conditions and the growth of our community. We can take steps to ensure we conserve, restore, and steward existing natural ecosystems and strive to balance the needs of our community with healthy, diverse natural systems.

Yarmouth will put increased attention to permanently protect our carbon ‘sinks’ and coordinate with regional efforts to conserve land in the watersheds that we are part of. We will adapt Town land management practices and support residents to do the same. These steps are important not just for climate emissions, but also for air quality, cooling during heatwaves, access to nature for recreation, education, and wellness, water supply protection, and support for our natural resource based industries like fishing and aquaculture.

Land conservation in Yarmouth is increased to buffer climate impacts

GOAL 7: Achieve 30% of town permanently conserved by 2050 by conserving an additional 1,550 acres of open space.

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
7.1 Facilitate land conservation with staffing, resources and partnerships.	X	X		X	X
7.2 Prioritize land conservation with a focus on connectivity, carbon storage, habitat, and public access following the Town of Yarmouth’s 2019 Open Space Plan.	X	X		X	X

Natural lands are storing more carbon and helping Yarmouth weather changing climate conditions

GOAL 8: Adopt stewardship practices that increase carbon storage and enhance the ecosystem’s resilience to climate change.

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
8.1 Improve land management with a focus on climate resilience and implementation of the recommendations within the 2019 Open Space Plan.	X	X			X
8.2 Assess current and potential carbon sequestration.	X		X		

Coastal areas are intact and act as natural buffers to flooding and sea level rise

GOAL 9: Adopt practices to ensure the ongoing health and vitality of shores and waters.	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
9.1 Support restoration of riverine and coastal ecosystems.		X		X	X
9.2 Plan for the impact of sea level rise on coastal properties, homes, and businesses.		X			X

“Protecting natural and working lands from development maintains their potential to draw back carbon from the atmosphere, as well as to provide important co- benefits. In addition to storing carbon, Maine’s natural and working land supports our farming, forestry, and outdoor-recreation industries. They provide clean drinking water and important wildlife habitat, and help moderate flooding events.”

MAINE WON’T WAIT (2020), p. 76

CONNECTED AND SAFE COMMUNITY

Climate change impacts a wide range of public health and safety concerns for both physical and mental wellbeing. The burden of climate change will not be felt equally across the community. People with existing social vulnerabilities, such as seniors or cost-burdened households, will be disproportionately impacted by climate hazards and climate-related health risks.

We can take steps to protect the services and infrastructure our community depends on while preparing for intensifying impacts of a changing climate. In doing this, we will strive to ensure everyone has access to the resources they need during emergencies and our community is able to be resilient to longer-term stressors.

Residents of Yarmouth feel safe amidst intensifying climate hazards

GOAL 10: Protect public safety by integrating climate projections into emergency preparedness protocols

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
10.1 Address the community's preparedness for heat waves					X
10.2 Maximize community adaptation for flooding and sea level rise					X
10.3 Update the Town's Hazard Mitigation Plan to integrate climate hazards					X
10.4 Prepare for long-term viability of town drinking water supply					X

Residents know where to go for services related to health risks and are able to easily access nature to enhance their health and wellbeing

GOAL 11: Enhance public health to improve community resilience to climate change

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
11.1: Pursue equitable access to community services and resources on climate-related health risks					X
11.2 Promote local food production and consumption			X		X
11.3 Improve access for Yarmouth residents to open space					X

Roads, bridges, and culverts are resilient as storms and flooding increase

GOAL 12: Protect critical infrastructure

	Supports 2030 target	Supports 2050 target	Reduce Emissions	Store carbon	Support adaptation
12.1 Evaluate and improve at-risk infrastructure		X			X

MOVING AHEAD

This Climate Action Plan will be a dynamic, living document that will evolve with Yarmouth.

To successfully accomplish strategies and actions outlined in this Plan, Town staff, stakeholders, and the wider community will need to actively champion its implementation. This Plan is not meant to sit on a shelf, but will be integrated into annual work plans, capital budgets, decision making processes, and regional collaborations. To facilitate progress, each goal is associated with metrics of success. Metrics and other progress updates will be shared and celebrated in efforts to build capacity, foster a culture of civic engagement and climate action, and bring everyone into the movement for our sustainable future.

This Climate Action Plan is a framework for the Town to implement, refine, and update over the years. As technology, funding opportunities, and community priorities evolve, this plan should be revisited and adjusted to meet the needs of the community and the capacity of municipal resources.

Recommended Review Cycle

1

Annual tracking of progress on key metrics, presented to Town Council in time to inform the following year's budget cycle.

2

Deeper review of the plan every 3 years in order to increase attention to areas that are falling short. Strategies and actions will be revised where context or technology has changed in order to strengthen the plan's ability to guide the Town Council toward meeting the 2030 and 2050 targets.