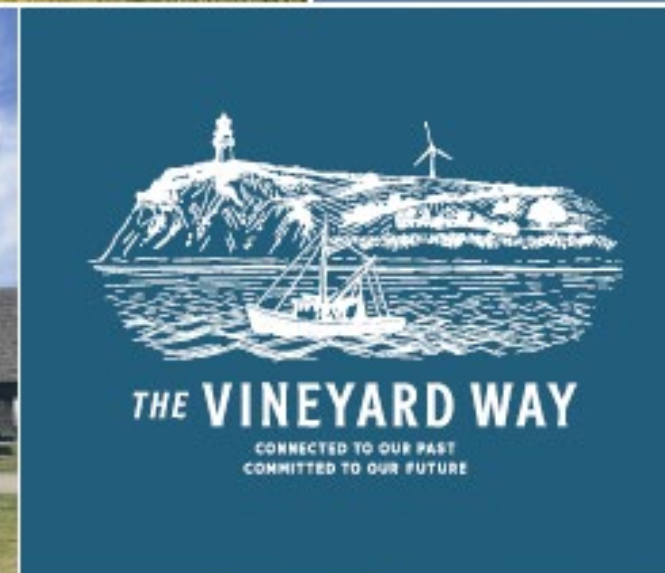


# Climate Action Plan

# THE VINEYARD WAY

CONNECTED TO OUR PAST  
COMMITTED TO OUR FUTURE



CLIMATE RESILIENCE



MARTHAS VINEYARD  
COMMISSION

October 2021 – August 2022

Climate Action Plan



# Today's Objectives:

- Thank you!
- Share the final plan overview
- Discuss town collaboration for implementation



To measure progress towards these Island-wide goals, it was necessary to first understand our baseline energy use and emissions data for 2018. The MVC Climate Action Task Force (CATF) Energy Working Group completed this baseline assessment, identifying three major categories of "energy use" and "emissions": transportation, building heating and hot water, and electricity.

## Why Are We Planning for Climate Action?

Since the Industrial Revolution human activity is changing our climate through:

- Increased burning of fossil fuels that emit carbon dioxide (CO2) for transportation (e.g., cars, boats, and planes), heating and cooling buildings, and electricity generation.
- Increased methane producing activities including factory farming, landfills, coal mining, oil and natural gas production, and wastewater treatment.

These gasses pollute the atmosphere and are known as "greenhouse gasses" due to their heat-trapping qualities that are causing the Earth to heat much faster than normal patterns. This greenhouse effect is exacerbated by the rapid destruction and loss of natural carbon sinks including wetlands, marshes, and forests, that when healthy can capture and store carbon and other greenhouse gasses.

Like most of the developed world, life on Martha's Vineyard is almost entirely fossil fuel dependent. The cars we drive, the food we eat, the products we buy, the energy we consume, the houses we build, the items we ship, and the ways we travel to and from the Island all rely on fossil fuels.

The Island community is taking steps to reduce its reliance on fossil fuels. As of July 2021, all six towns on Martha's Vineyard and the Martha's Vineyard Commission adopted the following resolutions:

Reduce fossil fuel use on the Island, from a 2018 baseline



50%  
by 2030

100%  
by 2040

Increase the fraction of our electricity use that is renewable

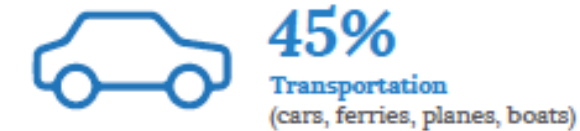


50%  
by 2030

100%  
by 2040

## Energy Use

Converting to a common unit of energy, the CATF estimates that the Island used approximately 945 GWh of energy across the three categories with the following breakdown:

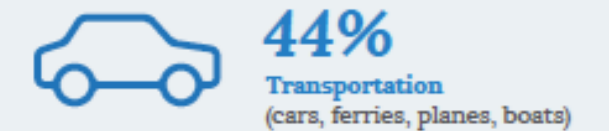


### Heating Energy Use Breakdown

Buildings	Million gallons
Fuel Oil	2.49
Propane	7.88

## Emissions

The CATF found that the Island emitted approximately 270,000 metric tons (606 million pounds) of CO2 in 2018, equivalent to the emissions of approximately 60,000 cars in one year. Emissions comprise the following figures:



### Transportation Energy Use Breakdown

Transportation	Million gallons
Gasoline	7.23
Diesel	3.02
SSA Marine Diesel	1.46
MVY Jet Fuel	0.7
MVY Aviation Gas	0.09



# Plan Overview

- Land Acknowledgement
- Executive Summary
- What Motivates Us
  - MV Climate Emissions Baseline
  - Climate Hazards and Impacts
  - Climate and the Environment
  - Climate Equity
- Engaging our Community
- Timeline of Key MV Climate Milestones
- **Thematic Group Chapters**
- **Overarching Goals**
- **Moving Forward**
- Acknowledgements

## A Community-Based Process

**Pre-Planning Activities**

- 20 listening sessions with 15 stakeholder groups
- 3 new town Climate Committees formed
- 6 meetings with Select Boards to introduce the planning process

**General Communication & Outreach**

- 25 stakeholder group presentations
- 40 Island newspaper stories and commentaries, magazine stories, and radio reports on climate change issues
- 19 monthly public events/presentations (focused on thematic working group)

**Planning Meetings**

# 40

thematic working group meetings were held and over 108 participants (including representatives from Towns, the Tribal Community, NGOs, businesses, and students) developed goals, objectives, and actions

**Planning Meetings**

# 93

town government board/committee members attended 6 online workshops

**Planning Meetings**

# 13

participants attended an in-person tribal engagement event

**Youth Engagement**

- 6 monthly student led climate cafes
- 10 school outreach events
- 64 students submitted art in the Vineyard Conservation Society climate change art contest

**Climate Action Week**

- 7 days with over 40 organizations that hosted events
- 1400 participants attended events
- 90 climate action pledges signed
- 31 electric vehicles (EVs) in the first-ever EV Fleet

# Thematic Planning Area Sections

- Thematic Area Description and Climate Impacts
- What's Happening Now
- Equity and Questions to Consider
- Goals and Measures of Success
- Objectives, Actions, Leads, Cost, Co-Benefits

## Land Use, Natural Resources and, Biodiversity

### GOAL #1

By 2040, land use decision-making prioritizes public safety and ecosystem values potentially impacted by climate change.

#### Objective 1:

By 2024, identify and map coastal and inland land vulnerable to flooding, land vulnerable to extreme wildfire risks, associated ecosystems, and land suitable for undevelopment that significantly contribute to climate resilience and public safety. (Some actions support Overarching Goal 1)

#### Co-Benefits/ Collaboration:



Actions	Lead	Due Date	Cost
<b>Action 1.1</b> All existing, relevant mapping is collected and synthesized.	Martha's Vineyard Commission	2023	0
<b>Action 1.2</b> Required new mapping is identified, created, and added to the overall synthesis.	Martha's Vineyard Commission	2023-24	\$
<b>Action 1.3</b> Review maps to identify areas of priority concern related to extreme flooding, wildfire, and contributors to climate resilience.	Martha's Vineyard Commission	2024	0
<b>Action 1.4</b> With other working groups, develop a collaborative long-term vision and land use decision-making framework that builds environmental and socioeconomic resilience.	Martha's Vineyard Commission and all thematic working group reps	2025	\$\$\$\$

#### Objective 2:

By 2028, develop tools to protect and enhance prioritized ecosystems that provide public safety benefits. (Some actions support Overarching Goal 1)

#### Co-Benefits/ Collaboration:



Actions	Lead	Due Date	Cost
<b>Action 2.1</b> Complete pilot Sengokontacket Pond Salt Marsh Migration Study.	OB Planning and Conservation, Martha's Vineyard Commission	2022	\$
<b>Action 2.2</b> Design an education program about the connection between the health of marsh ecosystems, climate resilience, and public safety.	Vineyard Conservation Society	2024	\$\$
<b>Action 2.3</b> Commission a comprehensive shoreline management plan for future public beach and coastal management.	Martha's Vineyard Commission	2025	\$\$\$\$
<b>Action 2.4</b> Assess health and migration potential of Island salt marshes and ID priority salt marshes for restoration.	Martha's Vineyard Commission, Young	2025	\$\$\$





- 15 Goals
- 56 Objectives
- 191 Actions

### Lead Organizations/Groups:

Ag Society, C&D Waste Committee, Vineyard Vision Fellowship, Cape Light Compact, Dukes County Emergency Managers Association, Dukes County health sub-committee, local CERT teams, Fire Chiefs, I2, Island Grown Initiative, Island Health Care, Kinship Heals, Morning Glory Farm, MV Center for Education and Training (formerly ACE MV), MV CLC Reps, MV Fishermen's Preservation Trust, MV Shellfish Group, MV Food Waste Initiative Committee, MV Seafood Collaborative, MV Shellfish Group, Cottage City Oysters, MV Tick Program, Martha's Vineyard Commission, MVC Climate Action Task Force, Polly Hill, BiodiversityWorks, President of Health Council, Prospective Emergency Manager, Steamship Authority, Town energy committees, Vineyard Conservation Society, Vineyard Power, Vineyard Sustainable Energy Committee

***Town Collaboration: Climate & Energy Committees (on VSEC and CRC)***

# Land Use, Natural Resources, and Biodiversity

## Actions include

- discontinuing or managing development in vulnerable areas (e.g., flood zones);
- preservation of salt marshes for their many community values;
- setting maximum disturbance limits for new development and standards for the use of native plantings; and
- protecting coastal pond water quality and our drinking water through increased collaboration and enhanced regulations.



*Town Collaboration for Implementation: Planning Boards, Conservation Commission*

# Transportation, Infrastructure, and Waste

## Actions include:

- planning for the protection or relocation of critical vulnerable roads that includes nature-based strategies,
- collaboration with the Steamship Authority to build resilient port infrastructure,
- assessing and addressing supply chain vulnerabilities, and
- reducing solid waste and increasing self sufficiency (food & construction waste).

*Town Collaboration for Implementation: Department of Public Works, Joint Transportation Committee Representative*



# Public Health and Safety

## Actions include

- bilingual community outreach to the public and health care providers on health-related climate impacts and ways to reduce vulnerability (e.g., heat stress, wildfire, tick borne disease)
- regional database of vulnerable populations
- one or more regional emergency shelters stocked and staffed
- development of an Island-wide emergency preparedness, response and recovery plan; and
- implementation of the regional Community Wildfire Protection Plan.



***Town Collaboration for Implementation:** First Responders, Board of Health, Town Emergency Managers*



## Economic Resilience

Actions for a resilient economic future include

- assessment of vulnerable businesses and options for new economic conditions (diversifying the economy)
- training residents for climate-related jobs,
- assisting the transition of vulnerable businesses (fossil fuel-related businesses and those in at-risk locations)
- encouraging businesses to adopt resilient and sustainable practices



*Town Department Collaboration for Implementation: Finance Committee and Board of Assessors*

# Food Security

## Actions include

- improving Northeast-based supply chains that minimize risk of disruptions
- developing standards for climate-friendly farming practices;
- increase aquaculture production and local purchase of local seafood
- ensuring that a consistent food supply will be in place for the food insecure and during emergencies;
- increasing access to lands for the Indigenous community;
- increased aquaculture production; and support for careers in commercial fishing.



*Town Collaboration for Implementation: Shellfish Constable,  
Zoning Board*



# Energy Transformation



Actions include:

- increasing efficient electric home heating, the use of electric vehicles, and solar energy;
- increase participation for energy transition assistance to low-and-moderate income residents.
- microgrids and battery storage at critical facilities (working with emergency management);
- advocacy for the transition of ferries to electric power;
- collaboration with Eversource for sufficient electric grid capacity
- towns develop plan for energy resilience with Island wide guidance
- Aid in implementation of stretch code with outreach and training

*Town Collaboration for Implementation: Building Department/Inspectors, Select Boards, Planning Boards*



## How this plan helps you:

- Grant agencies look favorable on regional projects (that help us all)
- One plan goal is to find sustainable funding
- Access more technical resources and expertise that support town initiatives and public awareness
- Collaboration on specific topics can reduce town staff workloads (e.g., updating floodplain bylaws)
- Blueprint for island climate resilience that includes specific “town actions” that can be used for town planning (e.g., Master Planning)

## How you can help with this plan:

- Encourage and support your town staff and boards members to engage in regional collaboration on specific actions
- Encourage your finance committee to begin considerations for town and regional climate funding needs



**THANK YOU FOR YOUR TIME & SUPPORT!**

Please download the plan and keep checking  
back on our progress at:  
[www.vineyardway.org](http://www.vineyardway.org)

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CLIMATE RESILIENCE



MARTHAS VINEYARD  
COMMISSION