# Climate Action Plan

STAKEHOLDER WORKING GROUP ENERGY - 11/18/2020





#### MEETING AGENDA

#### **Objectives**

- Recap Meeting 1 and progress to date
- Review and confirm criteria for use in selecting potential strategies and actions
- Evaluate potential strategies and actions to include in the Cape Climate Action Plan

9:00	Welcome and Introductions
9:10	Recap and Reflect on the Process to Date
9:20	Review and Confirm Criteria
9:40	Review and Discuss Climate Action Plan Strategies and Actions for the Energy Secto
	Small Group
10:30	Break
	Small Group
11:20	Discuss Conservation Actions in the Plan

11:50 Public Comment & Next Steps

#### MEETING GROUNDRULES

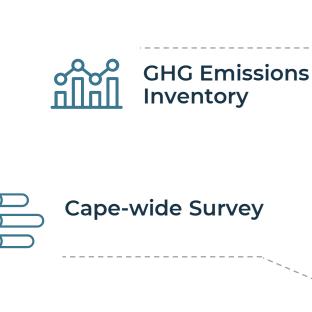
- Attend all meetings and participate actively in discussions.
- Come prepared having read any draft materials in advance of our meetings and having responded to any facilitator's requests (e.g. surveys providing input on materials in advance of meetings).
- Engage in respectful and constructive dialogue with other participants and seek creative solutions that respond to the interests of your own, as well as others', viewpoints.
- Represent and articulate the diverse range of interests and concerns of the constituencies you represent.
- Seek input from constituents, friends and neighbors, and keep them informed about the discussions and proceedings of the meetings.





- To identify, study and monitor the causes and consequences of climate change on Cape Cod as a basis to guide and develop science-based policies, strategies and actions that governments, businesses, organizations, and individuals can pursue to:
  - improve the region's resilience to climate hazards; and
  - mitigate climate change on Cape Cod through reducing net regional greenhouse gas emissions in support of the framework and targets established by the Commonwealth.

#### CAPE COD CLIMATE ACTION PLAN



Student Climate Ambassador Program

Mitigation and Adaptation Strategies

**Planning for** 

**Climate Action** 

Legal and Jurisdictional Analysis



Economic Impacts Modeling



Stakeholder Engagement







#### **FOCUS GROUPS**

Association to Preserve Cape Cod
Barnstable Clean Water Coalition
Cape Cod Chamber of Commerce
Cape Cod Climate Change Collaborative
Cape Cod & Islands Association of Realtors
Community Development Partnership
Compact of Conservation Trusts
Housing Assistance Corporation

#### MEETING 1 OBJECTIVES

- Introduce the Climate Action Plan process
- Provide an overview of a range of possible climate strategies, drawn from previous reflections, recent stakeholder meetings and the broader literature review completed
- Identify organizational or network priority issues and actions in the realms of climate adaptation and mitigation
- Reflect on existing organizational and network capacities to act on these priorities and possible support or needs for enhancing action

#### Working Group Meeting Series



MEETING 1

OCTOBER

Understanding Problems

MEETING 2

NOVEMBER

Identifying Solutions

MEETING 3

DECEMBER

Taking Action



#### **Energy**

#### STAKEHOLDER WORKING GROUP

#### **Meeting 1 Recap**

Discuss what is known today about sector contributions to greenhouse gasses and vulnerabilities to future climate impacts

Develop criteria for use in selecting among potential strategies and actions

#### **ADAPTATION**

- Need for affordable housing is an opportunity; development and redevelopment of housing should be in areas away from hazards and include energy efficiency measures and other climate-forward building methods
- There is an important intersection between local food production, land use, and energy
- Grid reliability is a concern and consideration should be given to a more dispersed structure

#### MITIGATION

- Responsibility is more personal in this area and changes to individual building energy use must be supported by local and state action; education is needed to adjust expectations and assumptions around reducing energy use
- There is an opportunity to make the Cape more walkable by increasing density in activity centers
- Consider alternatives in home heating

# QUESTIONS

## DISCUSSION







# CRITERIA FOR PRIORITIZING ACTIONS

Compiled from the feedback of all four Stakeholder Groups

#### **Feasibility**

- Science-based and data-driven actions
- Responsive to context
- Clarity/ease of implementation pathway

#### **Impact**

- Efficiency/effectiveness of action
- Achievement of multiple public benefits
- Planning for future conditions
- Ability to adapt to changing conditions
- Measurability

#### Cost

- Affordability
- Funding source

#### **Equity**

- Meeting the needs of all citizens
- Providing for vulnerable populations
- Who pays?

# QUESTIONS

## DISCUSSION







#### RESPONDING TO CLIMATE CHANGE INVOLVES TWO APPROACHES



#### **ADAPTATION**

Adjustments in human and natural systems that moderate harm or take advantage of beneficial opportunities



#### **MITIGATION**

Limiting or preventing greenhouse gas emissions and enhancing activities that remove these gases from the atmosphere



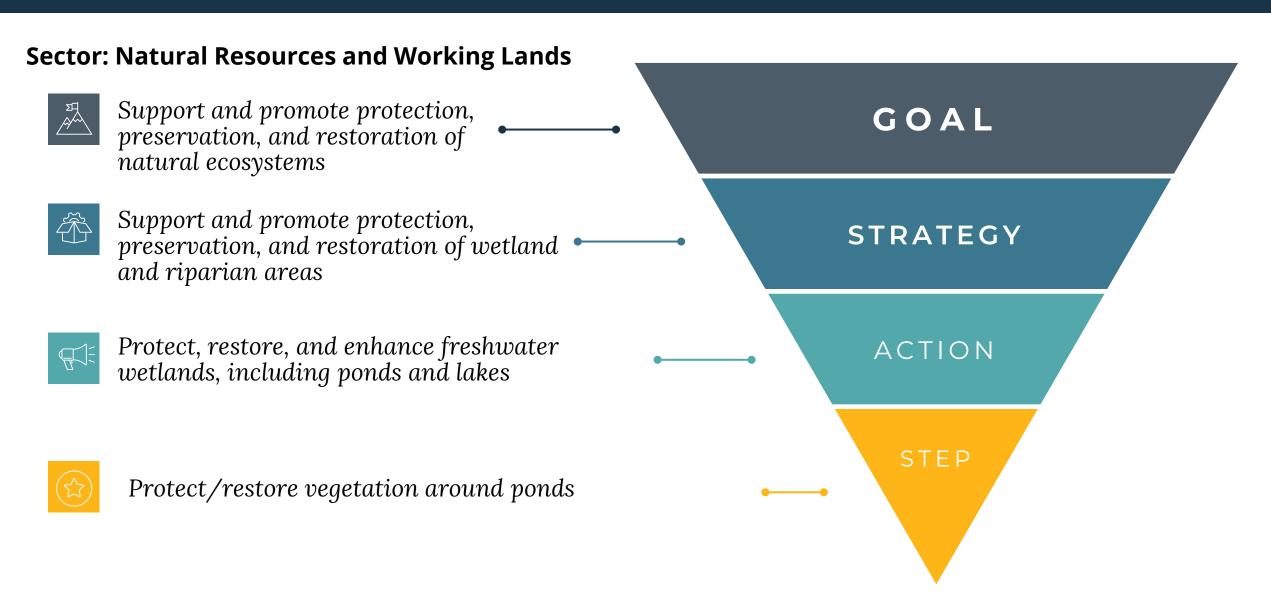
14 GOALS

44 STRATEGIES



Literature Review Cape Cod Climate Change Collaborative Stakeholder Input

#### CAP SECTOR GOALS AND STRATEGIES



# P Energy

GOAL

4 STRATEGIES



#### **ENERGY**

### Goals Strategies

#### **GOAL:** Increase the production and use of clean local energy

#### **Strategies:**

- Generate cleaner energy and greener power
- Modernize and optimize the grid
- Identify and utilize carbon offsets
- Achieve Green Communities designation in all Cape towns

#### COMMUNITY

### Goals Strategies

programs

#### **Strategies:**

- Increase education and communications about climate change mitigation options
- Increase education and communications about climate change adaptation options

#### GOAL: Accelerate adoption of emissions reduction strategies and actions across regional and local governments

#### **Strategies:**

- Where suitable, identify and adopt regional goals and policies that help advance mitigation strategies and actions
- Create mandates for municipal mitigation actions
- Increase capacity within municipal staffs; provide outside technical assistance

#### **GOAL**: Increase data collection and access

#### **Strategies:**

Identify more granular, town-specific data of GHG emissions

#### GOAL: Ensure the health, safety, and equitability of mitigation and adaptation solutions

#### Strategies:

Assess opportunities for green economy to create jobs with livable wages

#### **GOAL**: Establish strategic partnerships to advance shared goals

#### **Strategies:**

- Foster collaborations between levels of government
- foster collaborations between the public and private sectors

#### 2 SMALL GROUPS

Breakout 1: renewable/cleaner energy, including solar – blue

Breakout 2: Infrastructure including EV charging, batteries and storage – orange

#### HIGHLIGHTED ACTIONS

Renewable/cleaner energy, including solar

Infrastructure including EV charging, batteries and storage

#### CAP SECTOR GOALS AND STRATEGIES ENERGY

#### **GOAL**

Increase the production and use of clean local energy

#### **STRATEGY**

Generate Cleaner Energy and Greener Power

#### **ACTIONS**

- Facilitate renewable energy investment\*
- Use clean energy sources in municipal operations\* (4/9)
- Identify new fuel sources (4/9)
- Encourage community solar and solar car ports that limit new clearing and loss of sequestered carbon\* (7/9)
- Decarbonize industrial processes
- Identify affordable renewable energy sources (7/9)
- Explore potential offshore wind tech jobs,
   operations center on-Cape (4/9)

#### **STRATEGY**

Modernize and Optimize the Grid

#### **ACTIONS**

- Support expansion of EV charging network\*
- Support development of storage capability/battery technology\*
- Understand potential demand and capacity needs and plan for grid upgrades

# BREAK







#### HIGHLIGHTED ACTIONS

Renewable/cleaner energy, including solar

Infrastructure including EV charging, batteries and storage

#### CAP SECTOR GOALS AND STRATEGIES ENERGY

#### **GOAL**

Increase the production and use of clean local energy

#### **STRATEGY**

Generate Cleaner Energy and Greener Power

#### **ACTIONS**

- Facilitate renewable energy investment\*
- Use clean energy sources in municipal operations\*
- Identify new fuel sources
- Encourage community solar and solar car ports that limit new clearing and loss of sequestered carbon\*
- Decarbonize industrial processes
- Identify affordable renewable energy sources
- Explore potential offshore wind tech jobs, operations center on-Cape

#### **STRATEGY**

Modernize and Optimize the Grid

#### **ACTIONS**

- Support expansion of EV charging network\*
   (7/8)
- Support development of storage capability/battery technology\* (4/8)
- Understand potential demand and capacity needs and plan for grid upgrades (5/8)

#### HIGHLIGHTED ACTIONS

**Energy conservation** (identified as missing)

#### CAP SECTOR GOALS AND STRATEGIES HOUSING AND DEVELOPMENT

#### **GOAL**

Reduce GHG emissions from the built environment

#### **STRATEGY**

Strive towards Net Zero Energy Buildings; reduce energy consumption in non-residential structures

#### **ACTIONS**

- Ensure new commercial, industrial, and publicly funded construction is built to maximize energy efficiency\*
- Retrofit existing commercial, industrial, municipal and other public buildings\*
- Expand the Solarize Our Town program to all Cape communities\*
- Accelerate the decarbonization of industrial uses and processes\*

#### **STRATEGY**

Strive towards Net Zero Energy Buildings; reduce energy consumption in residential buildings

#### **ACTIONS**

- Retrofit existing residential buildings/houses\*
- Support Home Energy Scorecards
- Ensure new residential construction is built to maximize efficiency

#### CAP SECTOR GOALS AND STRATEGIES HOUSING AND DEVELOPMENT

#### **GOAL**

Reduce GHG emissions from the built environment (cont.)

#### **STRATEGY**

Promote efficient land use policies that protect the nature and character of the region

#### **ACTIONS**

 Advance sound land use policies within the RPP that promote development within activity centers and reduce sprawl, encourage and reward re-development and discourage new clearing of forested lands

# QUESTIONS

## DISCUSSION













# Student Climate Ambassador Program



The Cape Cod region is working hard to prepare for climate change and student voices matter. Student Climate
Ambassador Program seeks students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

**Meetings**DEC - MARCH

Topics include global climate issues, greenhouse gas reduction strategies, adaptation and resiliency planning, equity and climate change, communication...

**1**Small Project

Showing how school communities can take action and impact climate

# Student Climate Ambassador Program



The Cape Cod region is working hard to prepare for climate change and student voices matter. Student Climate
Ambassador Program seeks students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

#### **Applications and Selection**

- One-page letter of interest and teacher's reference
- Applications Due by December 1st
- Program is intended for a small group of students from grades 9-12.
- Selection will be based on regional geographical distribution, grade level distribution, quality of letter of interest, and teacher reference

ARE YOU CURIOUS ABOUT WHAT'S HAPPENING IN YOUR COMMUNITY TO ADDRESS CLIMATE ISSUES?

ARE YOU CONCERNED
ABOUT CLIMATE
CHANGE OR WOULD
YOU LIKE TO LEARN
MORE ABOUT IT?

DO YOU WANT TO LEARN HOW TO EFFECTIVELY CREATE CHANGE AND MAKE A DIFFERENCE?



## Become A Climate Ambassador

The Cape Cod region is working hard to prepare for climate change and student voices matter! The Cape Cod Commission is seeking students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

**LEARN MORE >>** 





#### THE CAPE COD COMMISSION IS SEEKING STUDENT VOICES FOR THE CLIMATE AMBASSADOR PROGRAM

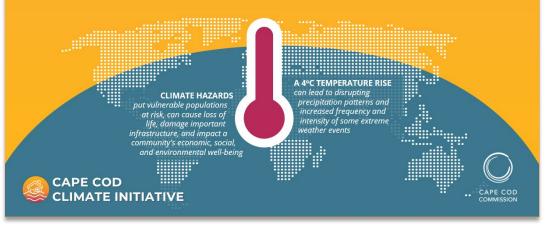
#### What to Expect

- ≈ Six virtual meetings from December 2020 to March 2021
- ≈ Meetings will run between 2 and 2 ½ hours
- ≈ Discuss and learn about global climate issues, carbon reduction strategies, resiliency planning, equity and climate change, and more
- Get creative by developing a small project on how school communities can impact climate
- Meet new friends, make a difference and raise awareness of climate issues!

#### **How to Apply** (Applications due by December 1st)

Please submit a one-page letter to frontdesk@capedcodcommission.org and let us know why you're interested in climate change and what you hope to learn or accomplish by being part of the Climate Ambassador Program. Submissions must also include a teacher reference.

**ABOUT:** The Climate Ambassador program is intended for a small group of students from grades 9-12. Selection will be based on regional geographical distribution, grade level distribution, grade level distribution, quality of letter of interest, and teacher reference.



# Climate Action Plan

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