# Climate Action Plan

STAKEHOLDER WORKING GROUP HOUSING AND DEVELOPMENT - 11/19/2020





#### 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

1:00	Welcome and Introductions
1:10	Recap and Reflect on the Process to Date
1:20	Review and Confirm Criteria
1:40	Review and Discuss Climate Action Plan Strategies and Actions
	Small Groups
2:30	Break
	Small Groups & Full Group Discussion
3:45	Public Comment & Next Steps
4:00	Adjourn

#### MEETING GROUNDRULES

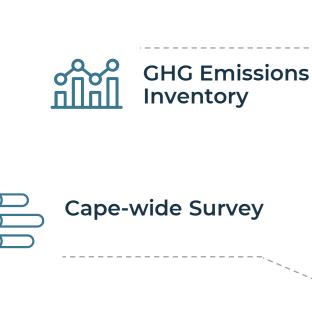
- Attend all meetings and participate actively in discussions.
- Come prepared having read any draft materials in advance of our meetings and having responded to any facilitator's requests (e.g. surveys providing input on materials in advance of meetings).
- Engage in respectful and constructive dialogue 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



#### **Housing and Development**

#### 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

- Ensure that affordable housing isn't developed in vulnerable locations
  - People with fewer resources will have more difficulty with repairs and insurance relevant to flooding and natural disasters
- Better standards for buildings in the floodplain are good but could increase the cost of development
- A conflict of interest between towns' climate planning to address vulnerabilities and the desires and need for a strong tourism industry that relies on beach access

#### MITIGATION

- Need to ensure efforts to develop more efficient housing aren't counterproductive to producing affordable housing
- Transportation improvements are critical, including new and increased public transit and bicycle facilities, and shifts to EVs
- Increased density of development can reduce sprawl and could provide greater sequestration opportunities through land conservation
- Need for education and outreach to help individuals understand their impact and vulnerabilities and actions they can take

# 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



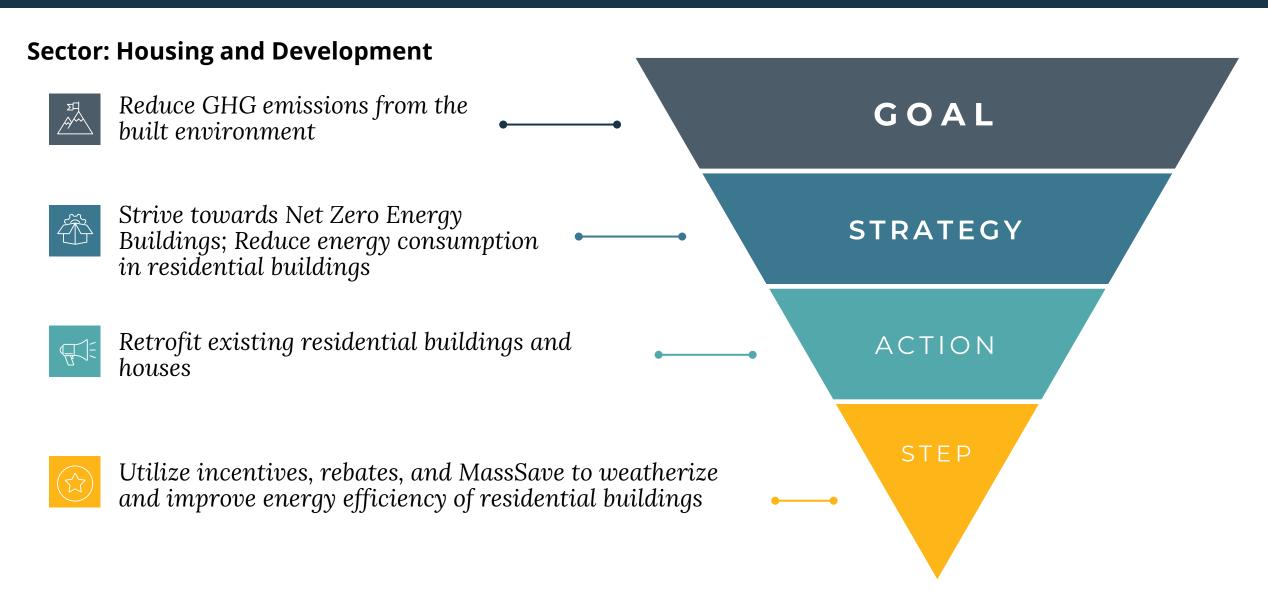
14 GOALS

44 STRATEGIES



Literature Review Cape Cod Climate Change Collaborative Stakeholder Input

#### CAP SECTOR GOALS AND STRATEGIES



# Housing and Development

3 GOALS 12 STRATEGIES

## HOUSING AND DEVELOPMENT

#### **GOAL**: Reduce GHG emissions from the built environment

#### **Strategies:**

- Strive towards Net Zero Energy Buildings; reduce energy consumption in non-residential structures
- Strive towards Net Zero Energy Buildings; reduce energy consumption in residential buildings
- Promote efficient land use policies that protect the nature and character of the region

#### **GOAL**: Reduce GHG emissions from waste management systems

#### **Strategies:**

- Increase diversion of waste from landfills in the short-term; eliminate sending waste to landfills in the long-term
- Reduce landfill emissions
- Improve efficiency of wastewater treatment systems

#### GOAL: Improve and advance the resilience of the built environment

#### **Strategies:**

- Address vulnerabilities in public infrastructure
- Identify a uniform approach to managing development in coastal resource areas region-wide
- Retrofit buildings located within climate hazard areas
- Address vulnerabilities in the road network
- Relocate vulnerable buildings and structures
- Ensure regional policies promote long-term infrastructure resiliency

#### 2 SMALL GROUPS

**Breakout 1: Retrofitting buildings and infrastructure** 

**Breakout 2: Policies & Regulations for Future Development** 

#### HIGHLIGHTED ACTIONS

**Breakout 1: Retrofitting buildings and infrastructure** 

**Breakout 2: Policies & Regulations for Future 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

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

#### **GOAL**

Improve and advance the resilience of the built environment

#### **STRATEGY**

Address vulnerabilities in public infrastructure

#### **ACTIONS**

- Explore remedies to state regulatory barriers that delay or prevent solutions to resiliency problems
- Develop guidance on planning for long-range sea level rise scenarios
- Assess and correct vulnerabilities in utility infrastructure
- Conduct vulnerability assessments of municipal facilities

#### **STRATEGY**

Identify a uniform approach to managing development in coastal resource areas regionwide

- Adopt uniform regulations region-wide to limit new development and redevelopment in the floodplain and vulnerable areas
- Develop regional sediment management plans
- Look at remedies to the challenges of private property ownership in coastal hazard areas
- Consider a coastal District of Critical Planning Concern

#### **GOAL**

Improve and advance the resilience of the built environment (cont.)

#### **STRATEGY**

Retrofit buildings located within climate hazard areas

#### **ACTIONS**

- Elevate buildings
- Floodproof or retrofit buildings to withstand flooding
- Support on-site renewable energy generation

#### **STRATEGY**

Address vulnerabilities in the road network

- Improve stormwater management through culvert retrofits and other stormwater best management practices
- Assess low-lying roads and take appropriate action

#### **GOAL**

Improve and advance the resilience of the built environment (cont.)

#### **STRATEGY**

Relocate vulnerable buildings and structures

#### **ACTIONS**

Move buildings and infrastructure out of the floodplain

#### **STRATEGY**

Ensure regional policies promote long-term infrastructure resiliency

#### **ACTIONS**

None identified yet

# BREAK

## Return at 2:35





#### HIGHLIGHTED ACTIONS

**Breakout 1: Retrofitting buildings and infrastructure** 

**Breakout 2: Policies & Regulations for Future 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

#### **RELATED TRANSPORTATION STRATEGY & ACTIONS**

#### **STRATEGY**

Encourage more efficient land use patterns

- Mix land uses where possible
- Promote infill and adaptive use development
- Promote Transit Oriented Development (TOD)
- Focus Growth in Activity Centers
- Consider undevelopment where appropriate

#### **GOAL**

Improve and advance the resilience of the built environment

#### **STRATEGY**

Address vulnerabilities in public infrastructure

#### **ACTIONS**

- Explore remedies to state regulatory barriers that delay or prevent solutions to resiliency problems
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#### **STRATEGY**

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#### **BREAKOUTS**

**Breakout 1: Retrofitting buildings and infrastructure** 

**Breakout 2: Policies & Regulations for Future Development** 

# Community

**5** GOALS

STRATEGIES

18 actions

#### COMMUNITY

### Goals Strategies

#### GOAL: Improve broad public knowledge and understanding of climate change impact 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 regionand 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 soluti

#### **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

# 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

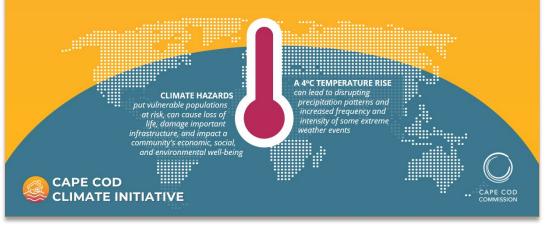
#### What to Expect

- ≈ 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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HOUSING AND DEVELOPMENT - 11/19/2020



