

Cape Cod Climate Action Plan: Energy

Stakeholder Meeting Summary

Virtual Meeting No. 1 | October 22, 2020 | 9am-12pm ET

MEETING IN BRIEF¹

On October 22, 2020, the Cape Cod Commission (Commission) held a meeting to engage stakeholders on the topic of Energy, to contribute to the development of a Cape Cod Climate Action Plan.

This meeting was the first of three planned meetings with the Energy stakeholder working group.

The objectives of this first Energy working group meeting were to:

- Orient the working group to the task and each other
- Discuss what is known about the sector's contributions to greenhouse gasses (GHG) and vulnerabilities to future climate impacts
- Develop criteria for use in selecting among potential strategies and actions

This working group will help the Commission develop a plan that addresses the region's contributions to and threats from climate change. After hearing presentations from Cape Cod Commission staff on the Climate Action Plan process, climate hazards and vulnerabilities, and the results of the recent GHG Emissions Inventory, working group participants were split up into small groups to discuss how mitigation and adaptation priorities intersected with other Cape Cod priorities, and which criteria should be applied to prioritize climate action strategies.

To view the full presentation slides, please click [here](#).

INTRODUCTION TO THE CAPE COD CLIMATE ACTION PLAN PROCESS

Cape Cod Commission staff provided a brief presentation on the Cape Cod Climate Initiative and the process to develop the Cape Cod Climate Action Plan. This presentation covered an overview of the Climate Action Plan process and timeline, components of the Climate Action Plan as they pertain to mitigation and adaptation, results of the recent Greenhouse Gas (GHG) Inventory, varying community engagement pieces, and specific information relating to Energy. In particular, Cape Cod Commission Deputy Director, Erin Perry, recognized the need to take action and address the region's contributions to and threats from climate change using the dual approach of adaptation *and* mitigation.

¹For additional detail, please visit the Cape Climate Initiative website: <https://www.capecodcommission.org/our-work/climate-change/>

Below are working group member questions and comments that followed Ms. Perry's presentation. Working group member questions are bolded and answers from the Cape Cod Commission are italicized.

- **Could you speak about the connection of this stakeholder planning process and the climate initiative? With the recent amendments put forward, which led to a climate action subcommittee, will this inform development of amendments to our Cape Cod regional policy plan (RPP)?**
 - *We convened a climate action subcommittee, made up of Cape Cod Commission members, to guide development of the climate action plan and consider amendments to the Regional Policy Plan (RPP). The subcommittee will continue to be engaged in this process. Amendments to the RPP were put forward by citizen's petition and aspects of those proposed amendments will be included in the climate action strategies database. One potential outcome of this process may be amendments to the RPP. We will be reporting back to the subcommittee and they will use the input from this process to evaluate what types of amendments may be made to the Regional Policy Plan.*
- **I'm wondering about adaptations to our economic/business models?**
 - *Certainly, we are also looking at business issues related to Covid-19. We are working on this as a result of the pandemic, as well as climate hazards. We just recently hired a consultant to define economic impacts and will be focusing more on that topic.*
- **Regarding intersectional problem-solving, I am wondering what has been done to collaborate with other social groups around issues of racial/climate justice?**
 - *We are working hard to reach out to a wide range of stakeholders. This is something we have experience doing through our transportation work and we are trying to model those strategies here. We are trying to engage folks who don't usually come out to meetings. We've developed online games before, as a way to share information and as a mechanism to solicit feedback as well. We also recognize there are challenges to participating virtually, so we are trying to identify a number of ways to connect on different platforms. We will also be convening a communications and education working group that will plan to meet in the evenings.*
- **Who has jurisdictional capability to make things happen? Does it sit with CCC, or the towns? Is it through the LCP process, is this where this gets played out more locally?**
 - *We are also doing a legal and jurisdictional analysis to determine where actions will be most appropriate. There are certainly various actions we can include in a Climate Action Plan for the region that the CCC can work on and others that are more appropriate at the local scale. We are working to get clarity and hope to provide this for all actors across the region.*

ADAPTATION – WHAT WE KNOW TODAY ABOUT HAZARDS AND VULNERABILITIES

Cape Cod Commission Natural Resources Program Manager, Heather McElroy, reviewed risks of existing climate hazards relative to Energy. She explained that over the next 80 years Cape Cod

will experience increases in precipitation, rising temperatures, significant sea-level rise (SLR), and more extreme weather events. A series of maps displayed during the presentation helped illustrate the extent of flooding and SLR that could occur. Based on these predictions, she then highlighted the effects specific to Energy, including (but not limited to):

- Warmer temperatures mean less energy demand for heat, though there will be proportionally higher energy demand for cooling
- Increased power demand, with possible supply issues like brown outs
- Wildfire threatening energy delivery (e.g., wooden poles)
- Winter storms and high winds damaging energy delivery
- Life-threatening power outages
- Power outages driving increased use of combustion engines for heat/power

Ms. McElroy then highlighted the following definition of adaptation: *adjustments in human and natural systems that moderate harm or take advantage of beneficial opportunities* and provided some examples:

- Cooling centers
- Tree trimming to protect energy delivery
- Identifying new fuel sources

Participants then discussed and answered the following questions:

- How do these hazards/vulnerabilities intersect with other Cape priorities for better or worse (consider equity here)?
- What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding these hazards?

Below is a brief synthesis of the results of each of these conversations. Working group participants worked in three small groups to identify intersecting priorities between the hazards and vulnerabilities to Energy that were presented and other existing Cape priorities. After identifying these priorities, working group participants were asked to consider which spheres of influence would be key to implementing any adaptation actions developed and how the Cape Cod community at large would play a role in this.

For the detailed record of these discussions by small group, please see Appendix B.

How do these hazards/vulnerabilities intersect with other Cape priorities (for better or worse)?

Working group members surfaced the tension between incremental change encouraged at the individual level, and the need for more rapid, wide-spread systemic adjustment with pressure from higher-level policy and regulatory bodies. Questions were also raised surrounding how to move the needle collectively to affect change on both of these fronts concurrently and to really garner support for a cultural shift in energy use on the Cape.

The following intersecting priority areas were identified in small groups:

- Transportation
- Equitable Housing and Cape Development
- Racial and Climate Justice
- Economic Development
- Green Infrastructure and Land Use Planning

For detailed answers, please see the respective question in Appendix B.

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding these hazards?

Participants identified support to reduce emissions would be needed from the municipal to the state level. Moreover, the role of education by and across all sectors and levels of influence was identified as foundational to building the connections between the intersecting priorities and strategy implementation. In particular, the necessity for a multi-pronged approach to encourage behavior changes around energy use was highlighted as needing to come not just from government and policy makers, but also peer pressure at the individual level.

Participants identified support to reduce emissions would be needed specifically from the following actors:

- Barnstable County and all individual towns (particularly those who have declared climate emergencies)
- Cape Cod Commission and other regional bodies
- Planning boards
- Historic Societies/Boards/Commissions
- Utilities and private industry
- Research and Development for alternative energy sources
- Faith networks
- Social/civic/citizen groups and individuals

For detailed answers, please see the respective questions in Appendix B.

MITIGATION – WHAT WE KNOW TODAY ABOUT REGIONAL GREENHOUSE GAS EMISSIONS

Ms. McElroy reviewed the results of the regional GHG Emissions Inventory, focusing on the specific results relevant to Energy on Cape Cod. Ms. McElroy explained that a GHG Emissions inventory is a comprehensive accounting of total greenhouse gas emissions for all man-made sources and identifies the sectors with the highest emissions. On Cape Cod, Transportation and Stationary Energy were the two largest sectors in terms of contribution to GHG emissions. She then noted that this inventory would be replicable in the future and could help to continue identifying high emissions sectors to focus mitigation actions.

Ms. McElroy then provided the following definition for mitigation: *limiting or preventing greenhouse gas emissions and enhancing activities that remove these gases from the atmosphere.* Based on the results of the GHG Emissions Inventory, she then provided the working group with some examples of Energy mitigation actions that could be implemented to reduce sector emissions:

- Incentives to generate renewable energy power onsite
- Clean power purchase agreements
- Promote walkable villages

Participants then answered the following questions with respect to mitigation:

- What other Cape priorities intersect, for better or worse, with efforts to decrease our emissions from this sector (consider equity here)?
- What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding Cape sources of emissions?

Below is a brief synthesis of the results of each of these conversations by question. Working group participants worked within three small groups to identify intersections between reducing emissions (e.g., through carbon sequestration) and other existing Cape priorities. Working group participants were then asked to consider which spheres of influence would be key to implementing mitigation actions developed by the working group and how the Cape Cod community at large plays a role in this.

Please see Appendix C for the record of these discussions by small group.

What other Cape priorities intersect, for better or worse, with efforts to decrease our emissions from this sector (consider equity here)?

Participants stressed the need for all actions to be accessible across all of the Cape's communities, with widespread information sharing and the opportunity for Cape Codders to meet these solutions where they can and take the most action possible. Mitigation actions for Energy were seen as intersecting with the following existing Cape priorities:

- Transportation
- Housing (particularly affordable housing)
- Land Use Planning and Cape Development (with a focus on equity/accessibility)

For detailed answers, please see the respective questions in Appendix C.

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding Cape sources of emissions?

Again, participants identified that support to reduce GHG emissions from Energy would be needed from the municipal to the state level. Other key actors that emerged were public and

private initiatives from energy utilities and programs (e.g., Cape Light Compact, National Grid, etc.), the faith community, community groups, and individual Cape Codders.

For detailed answers, please see the respective questions in Appendix C.

DEVELOPING AND PRIORITIZING CRITERIA FOR CLIMATE ACTION STRATEGIES

Ms. McElroy, provided examples of actions that would simultaneously have adaptation and mitigation benefits. She noted that one way to prioritize actions would be to look at those at the nexus of adaptation and mitigation for Energy, such as:

- Smart growth/land use
- Promote Renewable Energy storage
- Energy efficiency retrofits

Working group members were then asked to brainstorm about criteria that would be important in the prioritization of their climate actions to include in the regional plan. More specifically, participants were asked to think about and discuss:

- Important values that should drive the prioritization of actions to mitigate our impact and plan for resilience
- Key principles and considerations when making choices on what and where to focus actions in a context of multiple needs and limited resources

Working group members named the following key considerations for decision-making:

- **Equity.** Working group members emphasized that marginalized populations are disproportionately affected by climate change issues *and* solutions. They reiterated the need to create provisions in any plan that explicitly engage and address Cape Cod's most vulnerable populations by facilitating equitable access to participate in all parts of the decision-making. Working group members also stressed the importance of defining *who* Cape Cod's "vulnerable" populations include, and then working to specifically focus on how to integrate, solicit, and incorporate this set of voices. It was also noted that engaging the Cape's vulnerable populations could require going to meet folks where they were, rather than inviting their participation to an ongoing process.
- **High Impact.** Working group members invoked the principle of wanting Cape Cod to be "a leader, not a laggard," particularly due to its unique climate change vulnerability. Participants noted the magnitude of action that would be required for change to occur and that using a lens of high impact to prioritize actions would be key. This high-impact lens was described as not only critical to making concrete gains, but also as a way to illustrate progress to those who may be skeptical, overwhelmed, or otherwise unconvinced about the value of the proposed actions. Working group members reiterated that demonstrating "baby steps" that indicate momentum (even at the individual level) would ultimately catalyze and increase the necessary collective action to continue moving the needle with requisite urgency.

PUBLIC COMMENT

No public comment was made during this meeting.

WRAP UP AND CLOSING

Cape Cod Commission Deputy Director, Erin Perry, thanked participants for their cooperation, time, and commitment to the Climate Action Plan process. She then reminded working group members to reach out to Commission staff with further input, questions, or comments.

Participants provided feedback for the facilitation team to incorporate into the next meeting's process, including asking for specific ground rules for the working group to encourage even better collaboration and consensus building, as well as commending the team for convening a representative group and for running an interactive meeting.

CBI noted that it would send out a meeting summary to reflect back what was shared during the call and asked the working group to spend a little bit of time reviewing materials that would be shared in the future.

APPENDIX A: LIST OF PARTICIPANTS

First Name	Last Name
Lilli-Ann	Green
Liz	Argo
Brian	Miner
Chris	Powicki
Francie	Williamson
Gordon	Starr
Johannes	Raatz
Judith	Holt
Lee	Burns
Lew	Stern
Margaret	Song
Lauren	Sinatra
Nathaniel	Mayo
Rosaline	DeCosta
Andrew	Belden
Ronit	Goldstein
Steve	Casey
Walter	North
Elizabeth	Kirkpatrick

APPENDIX B: SMALL GROUP DISCUSSION SUMMARIES – ADAPTATION

Group 1

How do these hazards/vulnerabilities intersect with other Cape priorities (for better or worse)?

- Rental/ summer visitors - how communicate places to go, roads
- Waste - rail lines taken out, how get rid of waste?
- Cooling - so many buildings with in-operable windows. Adaptive measures to make sure operable.
- Cooling centers with ground air heat pumps - so easy to dig here.
- Generators - tension between adaptation and mitigation

Notes:

- Rising temps - lowering of water quality. All issues affected by energy-related impacts. All comes back to mitigation.
- FEMA maps - home is threatened. Devices to control SLR.
- Cooling centers - mitigation to cut down on use by individuals

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding these hazards?

- Utilities - adapt infrastructure. State regulators will have to help get it out of harm's way. Make sure not sited in harm's way.
- RandD for alternative energy - beyond us as Cape Cod. All of us urge action at the State and National level.
- Commission - sets the bar, towns carry it out. Leads to spotty implementation, but how it happens. State-wide bar.

Group 2

How do these hazards/vulnerabilities intersect with other Cape priorities (for better or worse)?

- A green economy: viability as a productive/sustainable economy. Can we move towards investing in this?
 - Income producer
 - "Ecotourism" is working in other places, why not CC?
- Economic progress pressure: need to re-invest in natural resources assets, can't expect money to be spent during COVID; aware/work collaboratively with towns and businesses to focus on asset dev/bus dev/rejuvenation
- Climate justice: who is impacted most negatively, who are the marginalized populations who are affected, can we incorporate this into our planning explicitly (EV dev; bikes, mass transit);
 - How do our adaptation solutions apply across populations/demographics/etc.?
- Health/safety of our populations: critical to include responsible solutions that considers this across all sectors for our citizens; imperative that health and safety is a lens that is always looked through when defining/developing these solutions
- Cannot solve climate issues alone, have to be looked at in concert with *all* other issues
 - Energy and Housing (for example): lack of affordable housing, and housing/buildings use of energy >> this has to do with adaptation/mitigation: as we address housing crisis - there are ways to ensure housing stock that is created allows people to stay in their homes and planning for young families to stay on the cape. Solutions to housing are lasting for many decades in the face of climate change and economic development
- Energy needs to be affordable for everyone who lives on cape cod ("energy insecurity") - as we move forward consider this for all our vulnerable populations (e.g. young people, elderly, etc.)
- Long term planning for those who reside on the cape (how are these all connected): cost of living, green infrastructure, economic development, housing, etc. > how do we balance this with planning for Climate Change
- Introduce renewables in an affordable way through smart development; creating renewables, providing income, etc.
- There is also an important intersection between local food production (food security, healthy population), land use, and energy)

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding these hazards?

- **Planning boards** (local) - need to be better educated; this is who currently has the teeth
- **Towns** who have declared climate emergencies - incorporate into planning guidelines
 - Recognize the local control
- **Regional bodies** - perhaps more important? We need this level to “have the teeth”
 - Cape Cod Commission?
- **Education - providing options and opportunities**
 - **Individuals also need to be provided with information to uptake**
- **Barnstable County**
 - Need county backing as well
- **Historic Societies/Boards/Commissions, etc. - There are many in our county.**

Notes:

- There is a natural conflict between Municipalities/Regional influence >> this is a puzzle; regional identities are a challenge in terms of implementation
- I think there is an important issue of collective agency as it relates to authority. Our conversation here spanned individual decisions to the authority of municipal planning boards, the regional planning authority and the state. There are dozens of organizations focused chiefly on environmental issues just on Cape Cod, spreading collective pressure on decision-makers is thin. Empowering collective action to demand the changes we know we need can be a part of this conversation.
- The lens of affordability (energy) and cost of living was also an important theme (cost of living)
 - Related: population migration—and the loss of many year-round residents who have historically provided the backbone of our local economies

Group 3

How do these hazards/vulnerabilities intersect with other Cape priorities (for better or worse)?

- Mitigation/adaptation promotes econ develop - local solar, local storage
- Grid reliability - backup power resources, more disperse structure pursue
- Housing
- Social equity
- Transportation - FEMA
- Costs
 - life cycle of assets vs costs
 - Habitat path to zero ability

Notes:

- CLC low-income program
- Sandwich CAN working with town on building net zero center senior active living

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding these hazards?

- CLC
- Habitat
- Social/civic/citizen groups
- Individuals
- CCC - DRI
- Towns
- Education
- Private industry
- Faith groups

Notes:

- Need education, tools to use to approach decision makers
- CCC require DRIs meet with CLC/CEC for pre-development coordination
 - should be needed for project funding, need to prove effort to be efficient
- Permitting authority should require alternative development analysis showing that alternative technologies/energy efficiencies are considered

APPENDIX C: SMALL GROUP DISCUSSION SUMMARIES - MITIGATION

Group 1:

<p>What other Cape priorities intersect (for better or worse) with efforts to decrease our emissions from this sector?</p>
<ul style="list-style-type: none"> ● Every home is as energy efficient as possible - working with Cape Light Compact. ● Heat pumps, solar panels - tension with natural gas consumption, leading source. Not every home can accommodate heat pump - other tier of technologies. ● Few homes can't incorporate heat pumps - possible to move to electrification of many homes. ● Yes encourage every new building net zero, but only 2% new. Every new municipal building has net zero. <ul style="list-style-type: none"> ○ Incentives: paradigm shift about where energy comes from.
<p>Notes:</p> <ul style="list-style-type: none"> ● Participant calculated # of homes and ages around the Cape: 94,290 homes. Broken out by town and when built, 89% predate 1999. ● Barrier - understanding. They pay an energy efficiency pool (\$150/yr), might encourage them to get them. Incentives, not enough to drive action. Enlightened self interest. ● Don't know what to do with by-products.
<p>What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding Cape sources of emissions?</p>
<ul style="list-style-type: none"> ● Cape Light compact with do assessment of efficiency. <ul style="list-style-type: none"> ○ Energy conservation required for any renovations ○ When selling, do an energy assessment - score card on efficiency (not sure ready for that) ● Personal responsibility - Financial benefits ● Municipal buildings
<p>Notes:</p> <ul style="list-style-type: none"> ● Identify, but what about mandating? Full of older homes, historic homes ● Suggestion: education ● Mandate like Title V? Authority from the State.

Group 2

What other Cape priorities intersect (for better or worse) with efforts to decrease our emissions from this sector?

- **Lens A:** Adjusting expectations/assumptions re: "freedoms/preferences" - in saving natural env't and reduce energy -- reducing driving; housing temperatures; saving energy/retaining culture will require an adjustment
- **Lens B:** Education is important so that people *want* to make personal choices that use less energy/reduce GHGs; work on having folks make informed choices
 - CVEC: Even with education sacrifices will need to be made. Most often, people are turning down smart designs/solutions for aesthetics that are only for 20 years, we cannot afford to maintain short-term freedoms at the cost of the longer-term picture
- Can we "require" every homeowner/business on Cape Cod to do an energy audit, increase the frequency of this - need to look at residential efficiencies?
- There is an opportunity to achieve carbon neutrality and health co-benefits, particularly by ending internal combustion car use (the biggest contributor to CC-GHG and major degrader of air quality).
- Traffic and transportation-GHG - there is an opportunity to reduce GHG and traffic simultaneously by producing an effective transit system.

Notes:

- What has been the uptake of home evals to reduce energy usage and conserve energy? Can we increase the number of people to have their homes/business evaluated to reduce energy? (lever for progress)
- There is a tension here b/w approaches in terms of requiring folks to do something and educating them so that they *want* to do it
- Energy audits are free - let's utilize this resource more effectively
- Do we have time for incremental change? We are under a lot of pressure to reduce GHGs/energy consumption?
 - Some can be done through education/home audits
 - Also need systemic change

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding Cape sources of emissions?

- Education: public eng't
 - Individuals – commissions, town energy committee of Wellfleet
 - Peer influence education
 - Vendor fairs
 - National Grid (Nantucket did this and has lots of lessons learned)
 - Mini lectures about relevant Energy information

- Expectation adjusting:
 - Use more of what we know about influence education to work on systemic change at the town/county/state level
 - Faith communities

Notes:

- What can we do in tandem to both adjust behavior/desires so people make smart decisions and effective incremental change (Education front) - increase better choices
- How do we also address the pressure to make system-wide changes under the time pressures that exist for Cape Cod with respect to climate change?
- A carbon tax is a policy alternative that some local environmental groups are pushing at the State level. Is there a way that Cape Cod can push the debate forward, including thinking forward to how we can spend carbon tax revenues for mitigation and adaptation projects.

Group 3

What other Cape priorities intersect (for better or worse) with efforts to decrease our emissions from this sector?

- Need to move quickly, act urgently
- Housing affordability, reducing first cost to make it more affordable
- Development style of the Cape: make Cape more walkable, densification in activity centers
- Transportation mitigation of energy use through different fuels as people look to buy new or replace vehicles
- Renewable energy development vs other development priorities

Notes:

- Educate about "first cost" (upfront cost for a technology) vs amortized benefits

What are the key areas of authority and influence in this sector on the Cape? What can Cape players influence regarding Cape sources of emissions?

- Community groups
- CLC incentivize fuel switching (interest free payment, subsidies)
- State - DPU, legislature
- Regional government - should bring state resources to the Cape (DOER, CEC), do community based social marketing (nudge towards better options)
 - Repository for available resources
- Look for areas for large density solar fields

Notes:

- Need tools and education, get the word out about programs to people
- Towns need resources to get grants that are out there (staff support and time)
- Disaggregate emissions info to town level for local knowledge
- Report card process to show progress - based on inventory sectors at town level, scaled up to county