

CAC Meeting Package 5/25/23

Truro Climate Action Remote Meeting Minutes

Wednesday, April 19, 2023, 10 am-noon

Attendees: Carol Harris, Rebecca Bruyn, Lili Flanders, Georgia Neill, Fred Gaechter

Public Comment: none

Minutes from the 3/16/23 meeting were approved. Lili will submit to Town Hall.

Truro Talks: Carol will contact Kristin Andres, from APCC, to write an article about resilient landscaping for May TT. Rebecca will contact Cape Light Compact re: article about solar for June TT.

Library Sessions: Session on resilient landscaping, with Kristin Andres is all set; Georgia is in contact with Dick Elkin about the May solar info session and will finalize posters with Justine; Lili will be the point person for the 'What Does it Mean to Be a Green Community?' session in June. More discussion needed to develop ideas for discussion/activities. Lili and her daughter, Edin Cook, will lead a children's library session on July 29th. We discussed the idea of having attendees write postcards to and from the environment, re: how we care for it/how it cares for us. Lili will ask Maggie Hanelt, head of children's activities at the library, about age group and art supplies and report to CAC as ideas develop.

Charge: Carol asked the group if we'd like to revisit and change the CAC charge. We discussed possibilities. There was general agreement that this was of interest, but not a priority.

Goals: Carol will email CAC members the 2022-23 goals. Members will respond re: if specific goals were met (or, as Fred suggested, surpassed!). Members will email Carol ideas for '23-24 goals. CAC will approve new goals and present to SB.

Update on Microgrids: Lili updated the group on the research she and Bob Higgins-Steele have been doing on the possibility of microgrids in Truro (PEP project). She shared a document Bob had written. Some questions & comments were: Who is the audience for the document? What is the CAC role in the project? Bring in local businesses and community to develop the ideas. Contact chief Collins re: emergency shelter.

High Head Trail: Fred asked the group if there is an interest in putting up signage about climate change on Truro Conservation Trust High Head trail. We discussed ideas to inform, but not overwhelm visitors with bleak climate news. Suggestions for signs with information about flora that helps with carbon sequestration. Fred will talk with TCT board and get back to us.

Whole Government Approach: on hold, pending review by Energy Committee

Other Business/Updates: Rebecca updated us on her experience at the EV convention in Boston on 4/13. She said the experience left her hopeful about the progress being made with EVs and charging stations.

Georgia and Lili will sign up to be at the Outer Cape info table at the Hyannis EV event June 3rd.

Carol mentioned that she would be recording an Earth Day podcast at the library with Emily Beebe, hosted by Justine Alten.

Lili alerted the group that she would be off Cape from 4/26-5/4.

Green Community Conversation: Since we had extra time, we discussed ideas for the June library session. Carol wanted to know what our goals are for the event. Some mentioned: involve residents, nurture connection, grow awareness, influence consumer decisions. We discussed sharing what Truro is already doing as a Green Community and then involving residents in a discussion about more we can do. Carol was interested in the bridge between envisioning and action. Lili talked about how small daily practices can lead to an awareness shift, which can lead to larger community actions, such as town ordinances, etc. Lili will continue to work on ideas and activities in line with discussion and report progress to CAC at next meeting.

Adjourned: 12 p.m.

Respectfully submitted

by Lili Flanders

Planning for Solar Panels

By Cape Light Compact & Truro Climate Action Committee

There are a few considerations when deciding if rooftop solar panels are right for you.

How much electricity do you use on an annual basis?

A correctly sized solar photovoltaic (PV or solar panels) system will produce enough electricity to meet your usage on an annual basis, while not consistently overproducing. You can see what your current electricity usage is using the **Eversource Green Button**. Before you install solar, you'll want to make sure you're using as little electricity as possible so that you do not need to pay more for a larger solar PV system. An easy way to do this is to take the easy, low-cost step of reducing your usage through an **energy assessment by Cape Light Compact (CLC)**.

Finally, make sure that you account for future electricity needs, such as installing heat pumps or an electric vehicle charging station.

What is the age and condition of your roof?

Solar panels typically last 20 to 25 years. Your roof should be less than 10 years old so that you don't have to pay to uninstall and reinstall panels to replace your roof a few years after installing your PV system. Solar panels can help preserve asphalt roofs but may cause moisture issues with cedar shake roofs – talk to your PV installer about ways to mitigate issues with cedar roofs.

A southern exposure is generally the best place for PV panels, but you don't need a perfect roof orientation for a PV system to pay itself off - east or west is OK too. You should also consider if you're willing to trim or cut down trees if they shade your roof.

Thinking of adding a battery?

If you plan to add a battery system to your solar installation, check out the Compact's **ConnectedSolutions program**. This program allows the Compact to discharge your battery into the grid during periods of peak electric consumption in exchange for a yearly incentive. Customers who enroll in the program are eligible to use

the zero interest [Mass Save Heat Loan](#) to finance the battery portion of their installation.

Financial Considerations

There are several different financial benefits available for PV systems.

Net metering

Net metering is the difference between the electricity produced by your panels and electricity provided by your electric company in a month. The utility is required to issue you a credit on your electric bill for any extra electricity your system produces over the course of a month. The more electricity you generate with your PV system, the less you have to pay for electricity from the grid.

On a monthly basis, you will either receive bill credits near the retail rate for any net electricity exports or be billed for the difference between your usage and your solar production. Your credits accrue in your utility account from one month to the next, which can help zero out your bill on an annual basis.

Own a second home? You can assign all or a portion of your credits to another account within the southeastern Eversource territory via a Schedule Z form from the utility, which you can find [here](#).

Net metering works separately from other incentives. Remember, Eversource will generally not cash out your accrued credits, so don't oversize your system!

Find more information go to:

- [State Guide on Net Metering](#)
- [Eversource Guide on Net Metering](#)

SMART Program

The SMART (Solar Massachusetts Renewable Target) program is a tariff-based program designed by the Massachusetts Department of Energy Resources (DOER), approved by the Department of Public Utilities (DPU), and administered by the investor-owned electric utilities. The program compensates PV system owners for the value of the energy their system provide to help make PV system ownership more affordable.

Under this program, PV system owners receive a monthly check from the utility for the total amount of electricity produced by their PV system. The program includes various adders for low-income customers, addition of battery storage, etc.

Find out more about the SMART program:

- [DOER's site with information about SMART](#)
- [SMART Program Page and Portal](#)

State & Federal Tax Incentives for PV system owners

MA State Tax Credit: 15% of gross system cost, capped at \$1,000, for primary residence only.

Federal Investment Tax Credit: The Residential Clean Energy Credit is a tax credit equal to 30% of the total cost of your PV system. This allows homeowners and businesses to apply 30% of the cost of their PV system as a credit when they file their federal taxes. The solar Residential Clean Energy Credit will last until 2033, when it drops to 26%. The credit only applies if you buy your system outright (as opposed to signing a lease).

Direct ownership: cash purchase (with or without financing)

This option provides the greatest benefits and is the most cost-effective option but requires cash on hand or financing. In this instance, the PV system owner keeps all the benefits, including all electricity produced, tax credits, and SMART incentive payouts. The panels are your asset and can add to the value of your home until near the end of system life. Since you own the panels, you are generally responsible for any and all system maintenance not covered by applicable system component warranties.

Third-party ownership: Solar Power Purchase Agreement (PPA)

In this model, a third-party owns the system on your roof and sells you the electricity produced by the system at an agreed-upon per-kWh price. The financial benefit is the difference between the PPA price and the retail value of electricity (or the NMC value). Although there is little or no upfront cost or self-financing needed, you will generally need strong credit. Generally, the electricity rate is locked in for the term of contract (but watch for price escalators!). Maintenance is usually provided for in contract but be sure to check. Some PPAs can include a buyout provision at the end of term. Keep in

mind that a PPA can be a liability if you sell your home - make sure you understand what happens if you need to move. Always read the PPA contract carefully!

Third-party ownership: Solar Lease Agreement

This model is similar to the PPA arrangement and generally offers the same advantages and disadvantages but is structured slightly differently. Under this model, rather than paying a per-kWh rate for the electricity the system on your home produces, you pay a flat monthly rate regardless of the amount the PV system produces that month. Under this arrangement, you have more exposure to production fluctuation and system downtime, so make sure the contract addresses these issues and offers a minimum production guarantee that provides greater value than the amount you'll be required to pay on an annual basis.

Additional Resources

- [Massachusetts Residential Guide to Solar Electricity](#) -
- [EnergySage](#)
- [Cape Cod Commission - Solar Screening Tool](#)

Truro Climate Action Committee

Summary of Goals 2022/23

Goal	Final Status
1. Develop a Climate Action Plan for Truro	
Draft a Climate Action Plan that will inform the municipality, residents, and businesses on actions to address climate change by obtaining input and review from Select Board, relevant boards and committees, residents, and businesses.	Final draft of phase one completed. Decided to obtain input from SB, committees/boards, and voters at next phase.
2. Promote EV Charging Stations for Businesses	
Educate business owners on the benefits of EV charging stations and on the EV charger installation process via information sheets and direct mailing.	Complete. Additional status?
3. Propose a Climate Change Agent for Truro	
Draft job description and submit to Town Manager, Health/Conservation Agent, DPW Director, Select Board, and other appropriate board/committee chairs for review and input.	Complete: submitted to Town Manager.
4. Outreach	
In-person information table at COA, Library, and other town buildings and events.	Complete: ## monthly events held at the library. Outreach at Transfer Station and COA.
5. Create or Improve Existing CAC Webpage	
Webpage development to make a user-friendly resource for climate information.	No action.
6. Meet with Boards/Committee to Identify Climate Actions	
Conduct workshops with appropriate boards and committees to identify climate change responsibilities and decision-making	Limited action, little response from boards/committees.
7. Recommend a Whole Government Approach	
Recommend that town government implement a whole government approach to addressing climate change	Final draft of policy and implementation plan completed, waiting for input from EC.

Goal	Final Status
8. Work with Cape Light Compact	
Work with Cape Light Compact to promote energy audits	Complete.
9. Inform Select Board and Municipal Managers	
Inform Select Board and Municipal Managers about state roadmap, laws, and codes	Decided to drop this goal.
10. Write Articles for Truro Talks	
Write educational/information articles about addressing climate change in each issue of Truro Talks	Complete.
11. Adopt Specialized Opt-In Energy Code	
Inform and engage citizenry, Town Government, other boards, and committees to participate in the stretch code adoption process and adoption of specialized opt-in code	Complete.
12. Make Article 17 of the 2020 Warrant Binding	
Educate and Engage citizenry, Town Government, other boards, and committees to make Article 17 of the 2020 Town Meeting Warrant binding policy at the 2023 Town Meeting	No action.

Anything we accomplished that isn't on this list?

Truro Climate Action Committee

2023/24 Goals

1. *Complete* a Climate Action Plan for Truro
2. Promote EV Charging Stations for Businesses
3. Outreach: I recommend that we keep this goal but rewrite it to reflect that we've dropped info tables and have established a monthly info session with the library.
4. Create or Improve Existing CAC Webpage
5. Meet with Boards/Committee to Identify Climate Actions
6. Recommend a Whole Government Approach
7. Inform Select Board and Municipal Managers *on a Quarterly Basis*: Having just reread our charge, I understand that we're supposed to report quarterly to the SB. I recommend that we adopt a goal for 23-24 to do that.
8. Write Articles for Truro Talks
9. We've met this goal, for the most part, but has it been worth the time and energy? Does anyone actually read the articles?
10. I'd support dropping this goal and putting energies into library sessions, podcasts, and newspaper articles instead.
11. If we create our own website, we could have an archive of articles to read, which we could update at our own pace.
12. Create a Truro Earth Day event for 2024
13. Create a town event that promotes climate change awareness and links it to direct community action. Possible activities: a beach clean-up; trail maintenance; a CAC logo design competition (or unveiling of results); tree seedling give-away
14. Recommend a town Tree Ordinance
15. Recommend that trees felled on town properties be replaced by new plantings.
16. Research and recommend new plantings around existing town buildings to help reduce energy use and capture carbon.
17. Invite businesses to an educational session for installing charging stations
18. Build groups of residents to meet regularly on what can be done by individuals, maybe this can be developed in response to June's event?
19. Identify a few measures to monitor such as residential energy audits, solar installations, if possible, the number of registered EVs per year, is there a way to measure heat pump installations, etc., and to be flushed out further.....
20. Continue with an overall educational program that includes schools, residents, businesses
21. Research green burials to determine if this can be implemented in Truro
22. Incorporate climate equity (justice) into all of our climate actions
23. Pollution vs climate change: can we address pollution other than greenhouse gas emissions as the CAC?