Cape Light Compact JPE Executive Committee & Governing Board Meeting

DATE: Wednesday, October 23, 2024

LOCATION: Cape Light Compact Offices – Martha's Vineyard Conference

Room: 261 Whites Path, Unit 4, South Yarmouth

TIME: 2:00-4:30 p.m.

Note: The meeting will be held as a hybrid meeting (in-person and through remote participation) pursuant to St. 2023, c. 2, which, among other things, extends the temporary provisions pertaining to remote meetings of public bodies under the Open Meeting Law to March 31, 2025. Members of the Public can join in by audio and follow along with Meeting Materials, see the information below. Written public comments should be submitted to Maggie Downey, Compact Administrator, at mdowney@capelightcompact.org by 2:00 PM on Tuesday, October 22, 2024, and should follow the public comment protocol below. Written public comments received after the October 22nd deadline will be distributed prior to the Compact's next Board meeting.

Telephone dial-in: +1 (646) 558-8656

Meeting ID: 826-1509-1378

Passcode: 453643

AGENDA

1. Public Comment

- 2. Approval of September 11, 2024, Open and Executive Session Minutes
- 3. Vice Chair's Report, Joyce Flynn
 - A. Report Out on Community Choice Aggregation Conference
- 4. Discussion and Presentation on 2025-2027 Energy Efficiency and Decarbonization Plan Proposed Budget and Potential Customer Bill Impacts, Margaret Song
- 5. Energy Efficiency Presentation on Results of "Residential Non-Participant Customer Profile Study", Miranda Skinner
- 6. Town of Barnstable Presentation on Proposed MicroGrid at Barnstable High School, Sean Hogan, Town of Barnstable
- 7. Administrator's Report
 - 1. Next Board Meeting: November 13, 2024

Board Member Update (Reserved for Updates on Member Activities the Chair Did Not Reasonably Anticipate Would be Discussed – No Voting)

Cape Light Compact Public Comment Protocols

for Governing Board Meeting

(June 2023)

The Cape Light Compact Governing Board has adopted the following protocols to assist the public in effective participation in its Governing Board meetings, where some Board Members, staff and members of the public may be participating remotely:

- 1. Members of the public are welcome to address the Compact Board during the public comment section of the meeting or in writing.
- 2. Members of the public addressing the Compact Board at the meeting must state their name, and if appropriate the name of the organization the person is representing. Oral comments must be limited to three minutes.
- 3. Members of the public may also submit written comments. Written comments shall be submitted in writing to the Compact Administrator, Maggie Downey, at mdowney@capelightcompact.org by 2 p.m. on the Tuesday before a scheduled Compact Governing Board meeting (or such other time as may be established by the Compact Administrator). Written comments must include a person's name and, if appropriate, the name of the organization the person is representing. Public comments received after the deadline will be distributed prior to the Compact's next Board meeting.
- 4. Members of the public addressing the Compact Board may not use fighting words, slander, unreasonably loud or repetitive speech, or speech so disruptive of the Compact Board meeting that the deliberative process is substantially interrupted or impaired. Speakers may not disrupt others. Speech must be peaceable and orderly.
- 5. All written public comments submitted in advance consistent with these protocols shall be included in the Compact's Board meeting packet.
- 6. Board members and staff cannot respond to public comments for topics not on the current agenda during the Board meeting. The Cape Light Compact Board may respond to comments either by putting them on the agenda of a subsequent meeting or by requesting the administrator or staff to respond to the comment.
- 7. Copies of the Board meeting packet will generally be made available to members of the public in advance of the meeting at the Cape Light Compact JPE's web site at www.capelightcompact.org
 Documents exempt from disclosure pursuant to the Public Records Law or protected by the attorney-client privilege shall not be included.

Cape Light Compact JPE Governing Board **Meeting Minutes** Wednesday, September 11, 2024

The Cape Light Compact JPE Board of Directors met on Wednesday, September 11, 2024, at 2:00 p.m. The meeting was held as a hybrid meeting (in-person and through remote participation) through a Zoom videoconference for members of the Board with audio call-in available for members of the public, pursuant to St. 2023, c. 2, which, among other things, extends the temporary provisions pertaining to remote meetings of public bodies under the Open Meeting Law to March 31, 2025.

Participating In-Person Were:

Participating Remotely Were:

- 5. Alan Strahler, Edgartown
- 6. Matthew Patrick, Falmouth
- 7. Wayne Taylor, Mashpee
- 8. David Jacobson, Orleans Alternate
- 9. Leanne Drake, Sandwich
- 10. Nicola Blake, Executive Committee, West Tisbury

Absent Were:

- 1. Forrest Filler, Aquinnah
- 2. David Anthony, Secretary/Executive Committee, Barnstable
- 3. Meghan Gombos, Dukes County
- 4. Peter Meleney, Oak Bluffs
- 5. Nathaniel Mayo, Provincetown
- 6. Russ Hartenstine, Tisbury
- 7. Jarrod Cabral, Truro

Legal Counsel Participating Remotely:

Audrey Eidelman-Kiernan, Esq., KO Law, P.C.

Staff Participation In-Person:

Margaret Song, Energy Efficiency Strategy and Policy Manager

Staff Participating Remotely:

Briana Kane, Residential and Commercial & Industrial Program Manager

Carley Leonard, Customer Service Coordinator

Dan Schell, Senior Analyst - Retail and Demand Response

David Botelho, Senior IT Services & Data Management Analyst

David MacLellan, Senior Analyst

Jason Bertrand, Marketing & Communications Coordinator

Kim Grant, Town Energy Coordinator

Laura Selmer, Energy Efficiency Analyst

Mariel Marchand, Power Supply Planner

Miranda Skinner, Strategy and Regulatory Analyst

Melissa Allard, Senior Administrative Coordinator

Phil Moffitt, Chief Financial Officer

Stephen McCloskey, Energy Efficiency Analyst

Tatsiana Nickinello, Energy Efficiency Analyst

Public Participants:

None.

Martin Culik called the meeting to order at 2:02 PM.

Public Comment:

No written comments were received in advance of the meeting and no members of the public were present for public comment.

APPROVAL OF MINUTES:

The Board considered the July 10, 2024 Open Session Meeting Minutes.

Robert Schofield moved the Board to accept the minutes and to release them, seconded by Joyce Flynn.

Sean	Hogan (17)	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Brian	Miner	Chatham	Yes
Brad	Crowell	Dennis	Abstained
Tom	McNellis	Eastham	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Yes
Wayne	Taylor	Mashpee	Yes
Martin	Culik	Orleans	Yes
Leanne	Drake	Sandwich	Yes
Susan	Ryan-Ishkanian	Wellfleet	Yes
Nicola	Blake	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (12-0-1 abstentia)

Alan Strahler joined the meeting at 2:06 PM.

OPEN SESSION VOTE ON ENTRY INTO EXECUTIVE SESSION PURSUANT TO M.G.L. C. 30A §21(A) (10) TO DISCUSS MATTERS BELOW, TO RETURN TO OPEN SESSION:

Martin Culik at 2:06 PM moved to enter into Executive Session pursuant to M.G.L. c. 30A §21(a)(10), to review and approve the July 10, 2024 Executive Session minutes regarding trade secrets and confidential, competitively sensitive or other proprietary power supply information, to return to open session thereafter. Seconded by Robert Schofield.

Sean	Hogan	Barnstable	Yes
Robert	Schofield	Bourne	Yes CO'
Brian	Miner	Chatham	Yes
Brad	Crowell	Dennis	Yes
Tom	McNellis	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes O
Valerie	Bell	Harwich	Yes
Wayne	Taylor	Mashpee	Yes
Martin	Culik	Orleans	Yes
Leanne	Drake	Sandwich	Yes
Susan	Ryan-Ishkanian	Wellfleet	Yes
Nicola	Blake	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (14-0-0)

RETURN TO OPEN SESSION:

Motion to return to open session made at 2:09 PM moved by Robert Schofield, seconded by Joyce Flynn.

Sean H	logan -	Barnstable	Yes
Robert S	schofield	Bourne	Yes
Brian N	Miner	Chatham	Yes
Brad CX C	Crowell	Dennis	Yes
Tom N	AcNellis	Eastham	Yes
	Strahler	Edgartown	Yes
Matt P	atrick	Falmouth	Yes
Valerie B	Bell	Harwich	Yes
Wayne T	aylor	Mashpee	Yes
Martin C	Culik	Orleans	Yes
Leanne D	Drake	Sandwich	Yes
Susan R	Ryan-Ishkanian	Wellfleet	Yes
Nicola B	Blake	West Tisbury	Yes

	Joyce	Flynn	Yarmouth	Yes
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Motion carried in the affirmative (14-0-0)

Colin Odell joined the meeting at 2:10 PM.

CHAIRMAN'S REPORT, MARTIN CULIK:

Martin Culik had the three new Compact staff members introduce themselves: Kim Grant, the new Town Energy Coordinator, David MacLellan, the new Senior Analyst, and Carley Leonard, the new Customer Service Coordinator.

Tim Carroll joined the meeting at 2:20 PM.

<u>DISCUSSION AND PRESENTATION ON MUNICIPAL AGGREGATION GUIDELINES, MA DEPARTMENT OF PUBLIC UTILITIES (MA DPU 23-67-A), MARIEL MARCHAND:</u>

Mariel Marchand reviewed the Municipal Aggregation Investigation Update (DPU 23-67) PowerPoint. She stated that the Department of Public Utilities (DPU) investigation into municipal aggregation guidelines (Guidelines) had two purposes. The first was to establish Guidelines governing the filing requirements and the process by which the DPU reviews and evaluates municipal aggregation plans, as well as the rules governing operation of a municipal aggregation program, and the other was to set forth a template plan that new aggregations could use when filing a plan. She stated that the Compact had numerous concerns with the DPU's original proposal. She stated that the DPU did listen to public comment and changed course and provided significantly more flexibility to municipalities, with the requirement of added transparency and public facing information.

Mariel Marchand reviewed the timeline. She stated that the DPU opened the investigation on August 23, 2023. She stated that on October 6, 2023 the Compact submitted Compact specific and joint comments to DPU and on October 23, 2023, municipal aggregators, including the Compact, submitted a joint request for Technical Session. The DPU heard the request and began a series of Technical Sessions from December 2023 through May 2024. She stated that on June 4, 2024, stakeholders, including the Compact, submitted a joint motion requesting approval of proposed Guidelines and on July 9th the DPU issued an Order approving the final Guidelines.

Mariel Marchand reviewed the key Compact concerns and outcomes. She stated that the first concern the Compact had with the draft Guidelines is that the aggregation plan should not be a living document. This makes it so that if an aggregator wanted to change something they would have to file a revised plan for approval by the DPU which would be a long process. She stated that the final Guidelines allow sufficient flexibility such that plan updates are generally not required, so long as ongoing program information is available to the public. A municipality may modify its aggregation plan consistent with Guidelines, allow for public review, and submit to DPU for informational purposes only. She stated that initially the draft Guidelines eroded important distinctions between competitive supply and municipal aggregation customers. She stated that there are a number of differences between municipal aggregators and competitive suppliers, but the draft guidelines were going to require suppliers of municipal aggregators to provide things to customers like a contract summary form and an automatic renewal notice. She stated that this does not make sense for municipal aggregations. She stated that the final Guidelines continue to exempt suppliers of municipal aggregations from the requirement to mail information disclosure labels.

Mariel Marchand stated that another issue of concern for the Compact was that the DPU should ensure continued due process for municipal aggregators after putting the Guidelines in place. The final Guidelines contain all requirements for plan approval filings and continued operations going forward. She stated that due process is upheld because a change to the Guidelines requires notice to interested stakeholders and opportunity for comment. She stated that the Compact was also concerned that the draft Guidelines did not allow for alternative approaches to certain customer notifications. She stated that the Compact's rate changes every six months, and that the Compact does not always have its rates finalized 30 days in advance to send out mailer notifications to our customers. She stated that it would be very challenging and expensive to comply with the initial proposed requirement. She stated that the final Guidelines allow for flexibility in timing and method of customer notification when the price or renewable energy content of a product changes and does not require mailing a product change notification to customers 30 days before price change. She stated that the Compact also wanted the Guidelines to include a waiver provision in case something came up that really didn't work for a particular aggregation and they were able to provide a good reason why to the DPU. She stated that the final Guidelines state that the DPU may, where appropriate, grant an exception or waiver from any provision of the Guidelines. In addition, the final Guidelines made clear that municipalities whose plans were already approved prior to the issuance of these Guidelines don't need to file a revised aggregation plan. Therefore, the Compact does not need to update its aggregation plan. She stated that the Compact does need to comply with the customer notification section, the access to ongoing program information section, and the annual reporting section of the final Guidelines that were approved.

Mariel Marchand reviewed the next steps in DPU 23-67. She stated that the Compact staff is in process of drafting the Compact's Annual Report due November 1st according to the newly designed format. She stated that there will be a number of tables that will also be posted to the Compact's website to comply with the Guidelines. The Compact will also be changing its price change notification and opt-out notice in compliance with the Guidelines. She stated that the DPU recently opened DPU 23-67-B to investigate Low-Income Community Shared Solar programs offered through municipal aggregation. The Compact will be participating in this proceeding.

Tom McNellis asked what the implications are of the Low-Income Community Shared Solar programs investigation. He asked if there is some reason for the investigation. Mariel Marchand stated that the DPU is looking at what these programs might look like, and how municipal aggregators can offer them. Audrey Eidelman Kiernan stated that several years ago when the Department of Energy Resources (DOER) updated their SMART program regulations it allowed for both the electric distribution companies and municipal aggregators to establish low-income community shared solar programs. Then the utilities were required to update their SMART tariffs with the DPU to reflect the new regulations and when they did that in a docket that dates back to 2020, the DPU said it needed to further investigate the ability of municipal aggregators to run low-income community shared solar programs. She stated that the DPU took four years to issue a ruling in the docket. She stated that recently an order from the DPU in DPU 20-145 stated that the DPU would investigate municipal aggregation low-income community shared solar as part of this municipal aggregation investigation in DPU 23-67.

<u>Discussion and Presentation on CLC 2022-2024 Energy Efficiency Plan Mid-Term Modification</u> <u>Filing, MA DPU 24-126, Margaret Song:</u>

Margaret Song reviewed the Cape Light Compact Mid-Term Modification (MTM) for Board PowerPoint. She reviewed a quick MTM history. She stated that in DPU 11-120A, the DPU created guidelines for what is considered an MTM. She stated that in 2013 the Compact had guidance from the DPU regarding the ability to

exceed an approved program budget by r 20%. She stated that in 2021 the DPU changed the guidelines to permit a program administrator (PA) to overspend a sector level budget by 10% without the need for prior DPU approval. Then in January 2022 after the Compact had filed its 2022-2024 Plan, the DPU amended the guidelines again stating that the PAs may not exceed their planned program budget by any amount without approval by the DPU.

Margaret Song stated that the Compact filed its first MTM for this three-year plan term on September 14, 2023. She stated that at that time the Compact believed the C&I budget to be significantly under and that the HEAT Loan and income eligible program budgets would be very close to the planned budget. She sated that once staff knew the Compact was going over the approved planned budget, the Compact filed for MTM approval with the DPU. She stated that in March 2024 the Compact received the DPU approval. She stated that in the interim, as staff monitored budgets, it became apparent that the HEAT Loan and income eligible budgets would exceed the approved planned budgets as well as those budget increases requested in the initial MTM. On August 12, 2024, the PAs, DOER, Attorney General's Office (AGO), and Low-Income Energy Affordability Network (LEAN) filed a Joint Motion to waive the program budget cap directive and requested an interpretation of guidelines requirements for MTMs where sector level spending exceeds 10% of the approved budget. She stated on August 15, 2024, the Compact submitted its second MTM for DPU approval and noted for DPU that all of the MTMs would be withdrawn if the Joint Motion for waiver was approved fully (because the Compact would be able to manage its budget to be within the spending requirements for the sector level). On September 3, 2024, the Joint Motion for waiver was approved and the Compact, withdrew its MTMs. She stated that all of the additional slides are solely for the Board's information. It was something the Compact presented to the Energy Efficiency Advisory Council (EEAC) and that was filed with the DPU as part of the August 15 MTM filing. She noted that the DPU was clear in its order on the Joint Motion that this waiver/approval was solely for the 2022-2024 term. She stated that there will still need to be a discussion about the MTM rules for the 2025-2027 term.

<u>DISCUSSION AND PRESENTATION ON PROGRAM CHANGES IN THE 2025-2027 ENERGY EFFICIENCY AND DECARBONIZATION PLAN, BRIANA KANE:</u>

Briana Kane reviewed the Cape Light Compact 2025-2027 Plan Updates PowerPoint. She reviewed some of the requirements that the PAs are being asked to meet in this energy efficiency plan (Plan) filing. She stated that the PAs are being asked to focus on equitable delivery of programs, improved customer experience, greenhouse gas (GHG) emission reductions and in doing all of that work within a \$5 billion statewide budget. The budget and GHG emission reduction targets were specified in a letter from the Executive Office of Energy and Environmental Affairs Secretary. She stated that we also have recommendations for sector level savings allocations for gas and electric and balancing the deployment of these various programs requires consideration of cost-effectiveness, ratepayer affordability, and the Commonwealth's equity priorities.

Briana Kane reminded the Board that the focus of the Plan is decarbonization, equity, customer experience, and the provision of data. She reviewed the commitments of the Plan. They are 1) shift resources out of market rate programs and into programs focused on underserved customer groups and communities, 2) energy efficiency and electrification improvements for, and efforts to reach and serve, low- and moderate-income (LMI) customers, renters, small businesses, and customers that primarily speak a language other than English (LOTE), 3) commitments to provide no-cost weatherization, barrier remediation, and electrification to rental properties in designated equity communities, 4) increased LMI heat pump production, along with increases in weatherization and barrier mitigation to ensure that LMI homes are electrification-ready, 5) aspirational benchmark to spend 15% of dollar volume of direct Mass Save contracts with diverse suppliers, and 6) enhanced language support for LOTE customers, including material translations, interpreter services, and multilingual staff.

Briana Kane reviewed the residential heat pump rebate offers. She stated that there is still a pathway for income eligible customers to receive heat pumps at no cost. There is also the moderate-income turnkey offer, which is a fully facilitated pathway for a customer to participate in the program through self-attestation and then income verification for other measures. She stated that there are also now three tiers of incentives for customers, which will help manage the budget. She stated that while the tiers and different levels of rebates can be confusing, we're hoping to make it as simple as possible and really provide support so that customers understand their options.

Briana Kane reviewed the HEAT Loan updates. She stated that the HEAT Loan amounts will be capped at \$25,000. She stated that the PAs are committed to negotiating an interest rate reduction and further evaluating the HEAT Loan offering. She stated that customers are still eligible to receive a 0% interest heat loan, but to help manage costs, the terms will be adjusted based upon income ranges. If a customer falls within that first level up to 135% of SMI, they would be eligible for a 7-year zero interest loan, if they fall within 135 to 300% of SMI, they would be eligible for a 5-year zero interest loan, and if they earn above 300%, they would be eligible for a 3-year zero interest loan.

Briana Kane reviewed the C&I Long-term approach to electrification. She stated that we are working with our vendors to get the word out about our program offerings. She stated that there have been several Main Streets offerings, and the Compact is seeing a big uptick in interest from those customers. She stated that the Compact has proposed an enhanced offering in this current 2022 to 2024 term for nonprofits that's being adopted by all PAs in the 2025 to 2027 term. She stated that the Compact is focusing on providing more robust support for our customers, and helping customers do some existing building studies of where their usage is and navigate through their energy efficiency journey.

Briana Kane reviewed data access. She stated that the Compact knows that data access is still very important to people to understand how the programs are working and operating. She stated the Compact has been working on some new metrics and key performance indicators (KPIs) to help people better understand how the program is progressing. She stated that there will be measure-level data on a quarterly basis and streamlined quarterly reports focusing on priority metrics and highlights. She stated that Mass Save data will continue to have enhancements to help to simplify user experience and highlight priority stats.

Briana Kane reviewed the key dates that are coming up. The revised draft of the Plan is filed on September 25th and the final Plan filing is on October 31st. She stated that we are still awaiting a procedural schedule and that the Plan order will be out in February 2025.

Tom McNellis asked if the Plan order in February 2025 is the one that goes into place. Margaret Song answered that order is what tells the Compact whether the DPU denied, approved fully, or conditioned the Plan. She stated that the guidance has been to continue offering programs that Compact is already approved to offer as long as they're not statutorily required to stop offering them, like incentives for fossil fuels equipment.

ADMINISTRATOR'S REPORT:

1. Update on USDA/RUS Rural Energy Services Program (RESP)

Margaret Song stated that everything is moving along, just a bit longer than we had hoped. She stated that once the award is announced that the letter of credit will be requested at that time.

2. Update on Net Zero Conference, October 24th, 2024

Martin Culik stated that if anyone is interested in the Net Zero Conference, the registration is open. He stated that it is on October 24th and the registration is free. Margaret Song stated that the Compact is a presenting sponsor.

3. Next Board Meeting: October 9th, 2024

Martin Culik stated that the next Board Meeting will be on October 9th.

ADJOURNMENT:

Motion to adjourn made at 3:18 PM moved by Robert Schofield, seconded by Brad Crowell.

Sean	Hogan	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Colin	Odel	Brewster	Yes
Brian	Miner	Chatham	Yes
Tim	Caroll	Chilmark	Yes
Brad	Crowell	Dennis	Yes
Tom	McNellis	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Yes
Wayne	Taylor	Mashpee	Yes
Martin	Culik	Orleans	Yes
Leanne	Drake	Sandwich	Yes
Susan	Ryan-Ishkanian	Wellfleet	Yes
Nicola	Blake	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (16-0-0)

Respectfully submitted

Melissa Allard

LIST OF DOCUMENTS AND EXHIBITS:

- Meeting Notice/Agenda
- July 10, 2024, Draft Open Session Meeting Minutes
- Municipal Aggregation Investigation Update (DPU 23-67) PowerPoint
- Cape Light Compact Mid-Term Modification (MTM) for Board PowerPoint
- Cape Light Compact 2025-2027 Plan Updates PowerPoint

Draft Executive Session Minutes Pursuant to G.L. c. 30A, §21(a)(10) Exempt from Public Records Disclosure Pursuant to G.L. c. 4, s. 7, cl. 26(d)

Draft Minutes subject to correction, addition and Committee/Board Approval

Cape Light Compact JPE **Governing Board Meeting Minutes** Wednesday, September 11, 2024

The Cape Light Compact JPE Board of Directors met on Wednesday, September 11, 2024, at 2:00 p.m. The meeting was held as a hybrid meeting (in-person and through remote participation) through a Zoom videoconference for members of the Board with audio call-in available for members of the public, pursuant to St. 2023, c. 2, which, among other things, extends the temporary provisions pertaining to remote meetings of and Committee 181 public bodies under the Open Meeting Law to March 31, 2025.

Participating In-Person Were:

- 1. Sean Hogan, Barnstable Alternate
- 2. Robert Schofield, Executive Committee, Bourne
- 3. Brad Crowell, Dennis
- 4. Tom McNellis, Eastham
- 5. Gary Senecal, Eastham Alternate
- 6. Valerie Bell, Harwich
- 7. Martin Culik, Chair/Executive Committee, Orleans
- 8. Suzanne Ryan-Ishkanian, Wellfleet
- 9. Joyce Flynn, Vice Chair/Executive Committee, Yarmouth

Participating Remotely Were:

- 1. Bill Doherty, Bourne Alternate
- 2. Colin Odell, Executive Committee, Brewster
- 3. Brian Miner, Chatham
- 4. Timothy Carroll, Chilmark
- 5. Alan Strahler, Edgartown
- 6. Matthew Patrick, Falmouth
- 7. Wayne Taylor, Mashpee
- 8. David Jacobson, Orleans Alternate
- 9. Leanne Drake, Sandwich
- 10. Nicola Blake, Executive Committee, West Tisbury

Absent Were:

- 1. Forrest Filler, Aquinnah
- 2. David Anthony, Secretary/Executive Committee, Barnstable
- 3. Meghan Gombos, Dukes County
- 4. Peter Meleney, Oak Bluffs
- 5. Nathaniel Mayo, Provincetown
- 6. Russ Hartenstine, Tisbury

Draft Executive Session Minutes Pursuant to G.L. c. 30A, §21(a)(10) Exempt from Public Records Disclosure Pursuant to G.L. c. 4, s. 7, cl. 26(d)

Draft Minutes subject to correction, addition and Committee/Board Approval

7. Jarrod Cabral, Truro

Legal Counsel Participating Remotely:

Audrey Eidelman-Kiernan, Esq., KO Law, P.C.

Tatsiana Nickinello, Energy Efficiency Analyst

Staff Participation In-Person:

Margaret Song, Energy Efficiency Strategy and Policy Manager

Staff Participating Remotely:

addition and Committee (Board Hoprova) Briana Kane, Residential and Commercial & Industrial Program Manager Carley Leonard, Customer Service Coordinator Dan Schell, Senior Analyst - Retail and Demand Response David Botelho, Senior IT Services & Data Management Analyst David Maclellan, Senior Analyst Jason Bertrand, Marketing & Communications Coordinator Kim Grant, Town Energy Coordinator Laura Selmer, Energy Efficiency Analyst Mariel Marchand, Power Supply Planner Miranda Skinner, Strategy and Regulatory Analyst Melissa Allard, Senior Administrative Coordinator Phil Moffitt, Chief Financial Officer Stephen McCloskey, Energy Efficiency Analyst

Before making the required Executive Session declaration Martin Culik asked those members who are participating remotely to confirm that no other person is present or able to hear the executive session discussion at their remote location. He did this by asking everyone as a group to say yes, affirming that no one could hear the discussion. After receiving affirmation from the Board members participating remotely, Martin made the required declaration to enter into executive session.

OPEN SESSION VOTE ON ENTRY INTO EXECUTIVE SESSION PURSUANT TO M.G.L. C. 30A §§21(A)(3) AND (10) TO DISCUSS MATTERS BELOW, TO RETURN TO OPEN SESSION:

Martin Culik at 2:06 PM moved to enter into Executive Session pursuant to M.G.L. c. 30A §21(a)10, to review and approve the July 10, 204 Executive Session minutes regarding trade secrets and confidential, competitively sensitive or other proprietary power supply information, to return to open session thereafter. Seconded by Robert Schofield

Sean	Hogan	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Brian	Miner	Chatham	Yes

Draft Executive Session Minutes Pursuant to G.L. c. 30A, §21(a)(10) Exempt from Public Records Disclosure

xempt from Public Records Disclosur Pursuant to G.L. c. 4, s. 7, cl. 26(d)

Draft Minutes subject to correction, addition and Committee/Board Approval

Brad	Crowell	Dennis	Yes	
Tom	McNellis	Eastham	Yes	
Alan	Strahler	Edgartown	Yes	
Matt	Patrick	Falmouth	Yes	
Valerie	Bell	Harwich	Yes	
Wayne	Taylor	Mashpee	Yes	~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Martin	Culik	Orleans	Yes	
Leanne	Drake	Sandwich	Yes	140
Susan	Ryan-Ishkanian	Wellfleet	Yes	10'
Nicola	Blake	West Tisbury	Yes	~ (9)
Joyce	Flynn	Yarmouth	Yes	1/0-

Motion carried in the affirmative (14-0-0)

APPROVAL OF MINUTES:

The Board considered the July 10, 2024 Executive Session Meeting Minutes.

Robert Schofield moved the Board to accept the minutes, seconded by Valerie Bell.

Sean	Hogan	Barnstable \(\square\)	Yes
Robert	Schofield	Bourne (Yes
Brian	Miner	Chatham	Yes
Brad	Crowell	Dennis	Abstained
Tom	McNellis	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Yes
Wayne	Taylor (1997)	Mashpee	Yes
Martin	Culik	Orleans	Yes
Leanne	Drake	Sandwich	Yes
Susan	Ryan-Ishkanian	Wellfleet	Yes
Nicola	Blake	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (13-0-1 Abstention)

RETURN TO OPEN SESSION:

Draft Executive Session Minutes Pursuant to G.L. c. 30A, §21(a)(10) **Exempt from Public Records Disclosure** Pursuant to G.L. c. 4, s. 7, cl. 26(d)

Draft Minutes subject to correction, addition and Committee/Board Approval

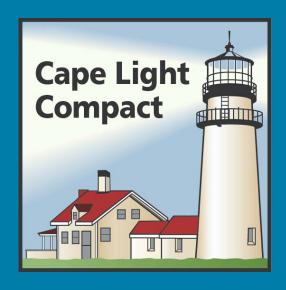
Motion to return to open session made at 2:09 PM moved by Robert Schofield, seconded by Joyce Flynn.

Sean	Hogan	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Brian	Miner	Chatham	Yes
Brad	Crowell	Dennis	Yes
Tom	McNellis	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Yes
Wayne	Taylor	Mashpee	Yes
Martin	Culik	Orleans	Yes
Leanne	Drake	Sandwich	Yes
Susan	Ryan-Ishkanian	Wellfleet	Yes all
Nicola	Blake	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes
Motion carried in	n the affirmative (14 mitted,	-0-0)	Sitional
Melissa Allard		1001	
	ENTS AND EXHIBITS Notice/Agenda	E WECH	

LIST OF DOCUMENTS AND EXHIBITS:

- Meeting Notice/Agenda
- July 10, 2024 Executive Session Minutes

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Your Trusted, Local Energy Resource

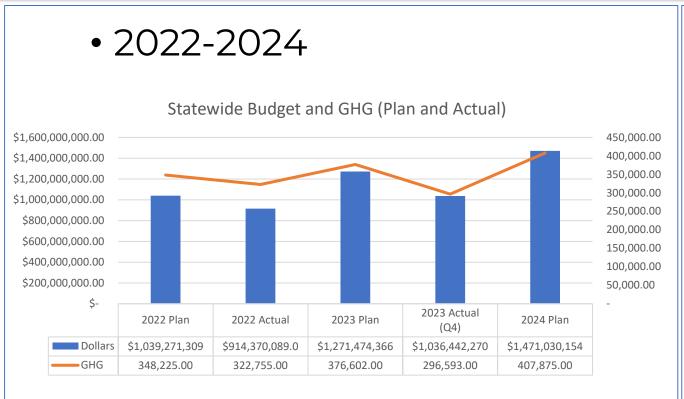
2025-2027 Energy Efficiency Plan

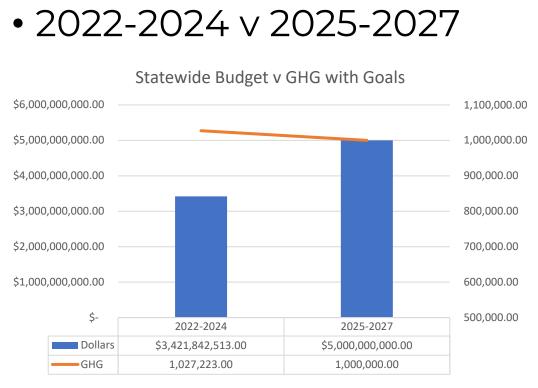
Margaret Song, Strategy and Policy Manager

October 23, 2024



Secretary of Executive Office of Environmental Affairs sets GHG goals on March 01, 2024







2025-2027 EEP Highlights:

New / Enhanced plan offerings based on policy goals



Turnkey offerings for select measures for a fully facilitated customer experience for Moderate Income (MI) and Small Business customers



Targeted enhanced community-based offers with a focus on equitable program delivery for residential and commercial renters/landlords, Low and MI customers, limited English influence



PAs will use both Area Median Income (AMI) and State Median Income (SMI) to determine a customer's eligibility



Statewide model to fund and deliver electrification projects



Changes to HEAT Loan



2025-2027 budget detail

	2025	2026	2027
Residential	\$53,577,962	\$52,393,441	\$ 62,445,337
Low Income	\$24,229,670	\$25,609,393	\$ 28,376,435
Commercial	\$15,590,520	\$16,676,057	\$ 17,135,590
Total	\$93,398,152	\$94,678,892	\$107,957,363

	2022-2024 (with MTM)	2025-2027
Residential	\$123,515,106	\$168,416,741
Low Income	\$ 38,727,531	\$ 78,215,499
Commercial	\$ 43,322,721	\$ 49,402,168
Total	\$205,565,357	\$296,034,407



Energy Efficiency Surcharge (EES) in cents/kWh

	Jan - June 2024 approved	July -Dec 2024 approved	Jan 1, 2025 estimated	Jan 1, 2026 estimated	Jan 1, 2027 estimated
Residential	2.091	3.898	5.468	5.065	5.976
Income- Eligible					
Commercial	1.179	1.558	3.223	3.436	3.704



Monthly, Yearly and Term EES Impacts

Resident Low-Inco	Years	EERF	Monthly Usage (kWh)	Total Cost (per month)	% change from 2024	Total Cost (per year)	Total Cost 2025-2027
	2024 (in effect)	3.898	650	\$25.34	N/A	\$304.08	
	2025 (proposed)	5.468	650	\$35.54	40%	\$426.48	\$1,287.60
	2026 (proposed)	5.065	650	\$32.92	30%	\$395.04	3yr net
	2027 (proposed)	5.976	650	\$38.84	53%	\$466.08	increase* = \$375.36

Commercial & Industrial	Years	EERF	Monthly Usage (kWh)	Total Cost (per month)	% change from 2024	Total Cost (per year)	Total Cost 2025-2027
	2024 (in effect)	1.558	1,650	\$25.71	N/A	\$308.52	
	2025 (proposed)	3.223	1,650	\$53.18	107%	\$638.16	\$2,051.88
	2026 (proposed)	3.436	1,650	\$56.69	120%	\$680.28	3yr net increase* =
	2027 (proposed)	3.704	1,650	\$61.12	138%	\$733.44	\$1,126.32

^{* 3}yr net increase = 2025-2027 total cost – 2024 Total Cost (per year) x 3 (assuming steady state)

Illustrative Bill Impacts – R1 (Res.)

Monthly	2	2024 In Eff	ect	2	025 Plann	ed	Total Bill	Impact
								<u>%</u>
<u>kWh</u>	<u>Delivery</u>	<u>Supplier</u>	<u>Total</u>	<u>Delivery</u>	<u>Supplier</u>	<u>Total</u>	<u>Change</u>	<u>Change</u>
100	\$28.60	\$13.10	\$41.70	\$30.17	\$13.10	\$43.27	\$1.57	3.8%
200	\$47.20	\$26.20	\$73.40	\$50.34	\$26.20	\$76.54	\$3.14	4.3%
300	\$65.80	\$39.29	\$105.09	\$70.51	\$39.29	\$109.80	\$4.71	4.5%
400	\$84.40	\$52.39	\$136.79	\$90.68	\$52.39	\$143.07	\$6.28	4.6%
500	\$103.00	\$65.49	\$168.49	\$110.85	\$65.49	\$176.34	\$7.85	4.7%
600	\$121.59	\$78.59	\$200.18	\$131.01	\$78.59	\$209.60	\$9.42	4.7%
700	\$140.19	\$91.69	\$231.88	\$151.18	\$91.69	\$242.87	\$10.99	4.7%
800	\$158.79	\$104.78	\$263.57	\$171.35	\$104.78	\$276.13	\$12.56	4.8%
900	\$177.39	\$117.88	\$295.27	\$191.52	\$117.88	\$309.40	\$14.13	4.8%
1,000	\$195.99	\$130.98	\$326.97	\$211.69	\$130.98	\$342.67	\$15.70	4.8%
1,250	\$242.49	\$163.73	\$406.22	\$262.11	\$163.73	\$425.84	\$19.62	4.8%
1,500	\$288.99	\$196.47	\$485.46	\$312.54	\$196.47	\$509.01	\$23.55	4.9%
2,000	\$381.98	\$261.96	\$643.94	\$413.38	\$261.96	\$675.34	\$31.40	4.9%
530 Avg	\$108.57	\$69.42	\$177.99	\$116.90	\$69.42	\$186.32	\$8.33	4.7%



Illustrative Bill Impacts – R2 (Res. Assistance)

Monthly	2024 In Effect			2	2025 Plann	Total Bill Impact			
								<u>%</u>	
<u>kWh</u>	<u>Delivery</u>	<u>Supplier</u>	<u>Total</u>	<u>Delivery</u>	<u>Supplier</u>	<u>Total</u>	<u>Change</u>	<u>Change</u>	
100	\$16.59	\$7.60	\$24.19	\$17.50	\$7.60	\$25.10	\$0.91	3.8%	
200	\$27.37	\$15.19	\$42.56	\$29.20	\$15.19	\$44.39	\$1.83	4.3%	
300	\$38.16	\$22.79	\$60.95	\$40.89	\$22.79	\$63.68	\$2.73	4.5%	
400	\$48.95	\$30.39	\$79.34	\$52.59	\$30.39	\$82.98	\$3.64	4.6%	
500	\$59.74	\$37.98	\$97.72	\$64.29	\$37.98	\$102.27	\$4.55	4.7%	
600	\$70.52	\$45.58	\$116.10	\$75.99	\$45.58	\$121.57	\$5.47	4.7%	
700	\$81.31	\$53.18	\$134.49	\$87.69	\$53.18	\$140.87	\$6.38	4.7%	
800	\$92.10	\$60.77	\$152.87	\$99.38	\$60.77	\$160.15	\$7.28	4.8%	
900	\$102.89	\$68.37	\$171.26	\$111.08	\$68.37	\$179.45	\$8.19	4.8%	
1,000	\$113.67	\$75.97	\$189.64	\$122.78	\$75.97	\$198.75	\$9.11	4.8%	
1,250	\$140.64	\$94.96	\$235.60	\$152.03	\$94.96	\$246.99	\$11.39	4.8%	
1,500	\$167.61	\$113.95	\$281.56	\$181.27	\$113.95	\$295.22	\$13.66	4.9%	
2,000	\$221.55	\$151.94	\$373.49	\$239.76	\$151.94	\$391.70	\$18.21	4.9%	
475 Avg	\$57.04	\$36.08	\$93.12	\$61.37	\$36.08	\$97.45	\$4.33	4.6%	



Illustrative Bill Impacts – small C&I

Monthly	2	2024 In Effe	ect	2	2025 Plann	ed	Total Bill	Impact
								<u>%</u>
<u>kWh</u>	<u>Delivery</u>	Supplier	<u>Total</u>	<u>Delivery</u>	<u>Supplier</u>	<u>Total</u>	<u>Change</u>	<u>Change</u>
5	\$15.63	\$0.65	\$16.28	\$15.71	\$0.65	\$16.36	\$0.08	0.5%
30	\$18.78	\$3.90	\$22.68	\$19.28	\$3.90	\$23.18	\$0.50	2.2%
80	\$25.09	\$10.39	\$35.48	\$26.42	\$10.39	\$36.81	\$1.33	3.7%
150	\$33.92	\$19.49	\$53.41	\$36.42	\$19.49	\$55.91	\$2.50	4.7%
275	\$49.69	\$35.73	\$85.42	\$54.27	\$35.73	\$90.00	\$4.58	5.4%
500	\$78.07	\$64.97	\$143.04	\$86.40	\$64.97	\$151.37	\$8.33	5.8%
750	\$109.61	\$97.45	\$207.06	\$122.09	\$97.45	\$219.54	\$12.48	6.0%
1,250	\$172.68	\$162.41	\$335.09	\$193.49	\$162.41	\$355.90	\$20.81	6.2%
2,500	\$330.35	\$324.83	\$655.18	\$371.98	\$324.83	\$696.81	\$41.63	6.4%
10,000	\$1,276.40	\$1,299.30	\$2,575.70	\$1,442.90	\$1,299.30	\$2,742.20	\$166.50	6.5%
1,650	\$223.13	\$214.38	\$437.51	\$250.60	\$214.38	\$464.98	\$27.47	6.3%

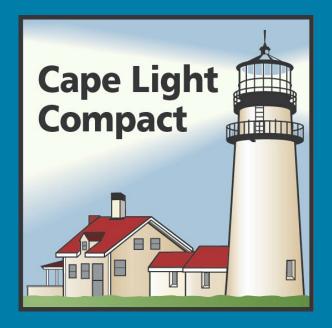


Year-over-Year Illustrative Impacts

Rate Class Information	Monthly Bill	Comparison	Monthly Bill	Comparison	Monthly Bill Comparison				
			2024 In Effect Planned	t vs. 2025	2025 Planned Planned	vs. 2026	2026 Planned vs. 2027 Planned		
			Change in Tot	al Bill	Change in Total Bill Change in Total		tal Bill		
Rate		kWh	Total Change	% Change	Total Change	% Change	Total Change	% Change	
Rate R-1 Residential	R-1	530	\$8.33	4.68%	-\$2.14	-1.15%	\$4.83	2.62%	
Rate R-2 Residential Assistance	R-2	475	\$4.33	4.65%	-\$1.11	-1.14%	\$2.51	2.61%	
Rate G-1 Small General Service	G-1	1,650	\$27.47	6.28%	\$3.52	0.76%	\$4.42	0.94%	



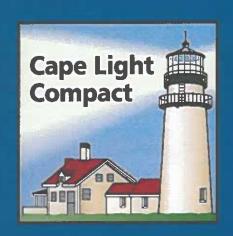
Questions?



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Year-over-Year Illustrative Impacts

Rate Class Informat	ion		nly Bill arison	Month Compa	•	Monthly Bill Comparison		
		2024 In Effe Planned		2025 Planne Planned	d vs. 2026	2026 Plann Planned	ed vs. 2027	
		Change	in Total Bill	Change	in Total Bill	Change	in Total Bill	
Rate	kWh	Total Change	% Change	Total Change	% Change	Total Change	% Change	
Rate R-1 Residential	R-1 530	\$8.32	4.67%	-\$2.13	-1.14%	\$4.83	2.62%	
Rate R-2 Residential Assistance	R-2 475	\$4.32	4.64%	-\$1.10	-1.13%	\$2.51	2.61%	
Rate G-1 Small General Service	G-1 1,650	\$27.44	6.27%	\$3.55	0.76%	\$4.42	0.94%	



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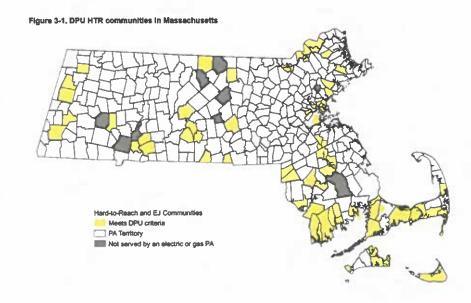
2013-2022 Residential Nonparticipant Study (MA24X24-B-RNPS)

Miranda Skinner Strategy and Regulatory Analyst

October 23, 2024

Background

- 2013-2017 Residential Non-Participant Customer Profile Study
- DPU Order on the 2022-2024 Plan
- CLC HTR Communities
 - Aquinnah
 - Barnstable
 - Bourne
 - Chatham
 - Dennis
 - Eastham
 - Edgartown
 - Falmouth
 - Harwich
 Oak Bluffs
 - Tisbury
 - Yarmouth





2013-2022 Non-Participant Key Findings

SW participation changes over time

- · Gas and electric participation rates increased statewide for all customer groups
- Participation increased in 97% of MA municipalities (100% of CLC municipalities)

SW changes in the participation gap

- Decreased for HTR communities and block groups with high concentrations of low- and moderate-income households
- Increased for block groups with high concentrations of renter-occupied, multifamily, and limited English-speaking households

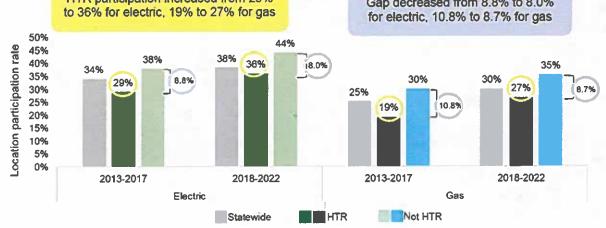


Statewide Participation Results

- HTR communities continue to have lower participation rates
- Participation increased in HTR communities



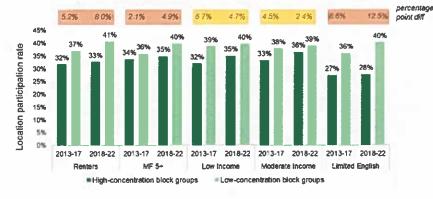
Figure 4-1. Location participation rate for HTR and non-HTR in the two 5-year periods, electric and gas programs





Statewide Participation Gap Results



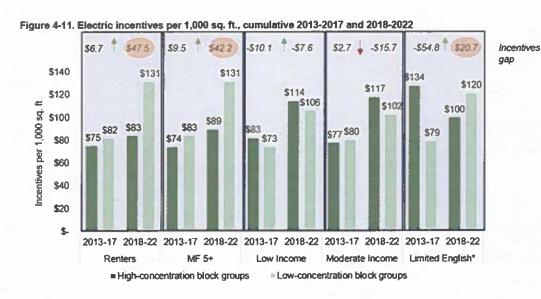


- There is still a participation gap between HTR and not HTR communities
- The gap decreased for lowand moderate-income customers
- The gap increased for renters, multifamily, and limited English households



Statewide Incentive Results

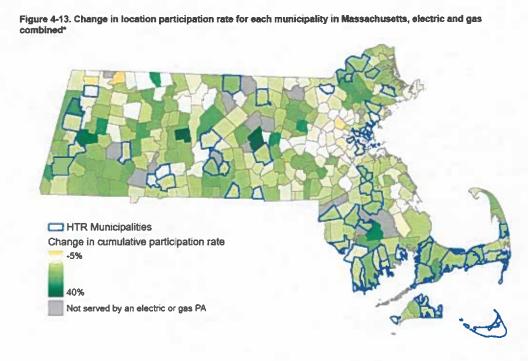
Incentives increased substantially for gas and electric programs



- Gap between renters and multifamily households increased dramatically
- Low and moderateincome customers had lower participation rates but received higher incentives than their counterparts

Statewide Participation Map

- Participation increased for 98% of HTR municipalities
- Participation increased in all CLC's HTR municipalities





Statewide vs CLC Municipality Participation

2013 to 2017 CLC municipalities had average increase of 13%

2013 to 2017 CLC HTR communities had an average increase of 11%

2018 to 2022 SW there was an average increase of 12%

2018 to 2022 SW HTR communities had an average increase of 10%



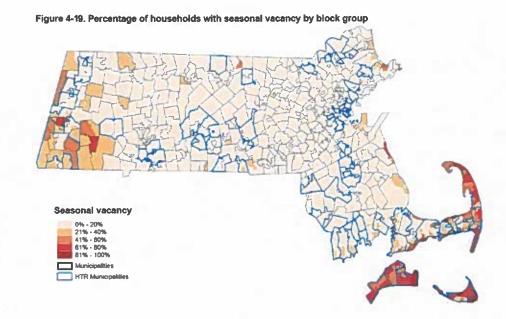
CLC Municipality Participation

Municipality	нтк	Cehort Years	PA service	Active locations		irticipa	ual oc ition rai 2019- 2021		Cumulative tocation participation rate (2013-2017)	Cumulative location participation rate (2018-2022)	Total households	inc	verage entives house 2016- 2018	per to	otal	Cumulative incentives per total households (2013. 2017)	Cumulative incentives per total households (2018- 2022)
Aquinnah	Yes	2022	E	443	3%	4%	4%	7%	13%	19%	1,214	\$6	\$10	\$24	\$83	\$40	\$165
Barnstable	Yes	N/A	E, G	25,427	9%	10%	13%	11%	33%	45%	20,228	\$115	\$201	\$258	\$255	\$721	\$1,257
Bourne	Yes	N/A	E, G	10,384	8%	8%	12%	11%	27%	42%	11,528	\$59	\$94	\$158	\$165	\$354	\$743
Brewster	No	N/A	E, G	8,140	9%	10%	12%	10%	33%	43%	5,619	\$121	\$159	\$243	\$276	\$663	\$1,180
Chatham	Yes	N/A	E, G	7,441	7%	7%	10%	10%	26%	37%	3,289	\$132	\$226	\$352	\$353	\$801	\$1,682
Chilmerk	No	2022	E	1,346	3%	4%	5%	7%	10%	21%	1,522	\$16	\$40	\$6 5	\$120	\$127	\$356
Dennis	Yes	N/A	E, G	14,531	8%	9%	13%	11%	29%	43%	8,186	\$137	\$240	\$398	\$358	\$843	\$1,838
Easthain	Yes	N/A	E, G	6,206	6%	9%	11%	12%	24%	42%	2,724	\$159	\$252	\$385	\$529	\$941	\$1,976
Edgartown	Yes	2022	E	4,573	3%	5%	6%	7%	13%	24%	1,505	\$82	\$224	\$353	\$659	\$720	\$1,914
Falmouth	Yes	N/A	E, G	22,043	8%	9%	13%	12%	30%	44%	14,237	\$122	\$182	\$278	\$341	\$716	\$1,370
Harwich	Yes	N/A	E, G	10,086	9%	10%	12%	11%	32%	42%	7,262	\$122	\$190	\$265	\$285	\$711	\$1,304
Mashpee	No	N/A	E, G	10,335	8%	10%	15%	19%	32%	55%	6,989	\$119	\$169	\$339	\$29 5	\$685	\$1,492
Oak Bluffs	Yes	2022	E	3,962	4%	4%	6%	7%	15%	24%	1,952	\$66	\$117	\$206	\$494	\$447	\$1,215
Orleans	No	N/A	E, G	4,885	9%	11%	12%	12%	32%	43%	3,866	\$111	\$190	\$238	\$274	\$675	\$1,216
Provincetown	No	N/A	E	2,047	10%	11%	12%	15%	38%	47%	1,996	\$83	\$121	\$362	\$681	\$484	\$1,895
Sandwich	No	N/A	E, G	9,884	10%	11%	14%	14%	35%	48%	8,927	\$94	\$153	\$211	\$403	\$563	\$1,213
Tisbury	Yes		E	2,590	6%	6%	7%	8%	23%	29%	3,421	\$54	\$55	\$110	\$200	\$264	\$596
Truro	No	N/A	E	2,559	6%	8%	10%	11%	21%	40%	1,031	\$116	\$229	\$410	\$702	\$707	\$2,261
Welffleet	No	N/A	E	3,652	6%	9%	10%	10%	24%	40%	2,284	\$76	\$151	\$244	\$452	\$501	\$1,364
West Tisbury	No	2022	E	1,991	4%	6%	8%	9%	16%	31%	1,372	\$82	\$102	\$155	\$451	\$430	\$1,039
Yarmouth	Yes	N/A	E, G	16,817	10%	11%	13%	13%	34%	50%	11,914	\$142	\$223	\$292	\$273	\$832	\$1,413



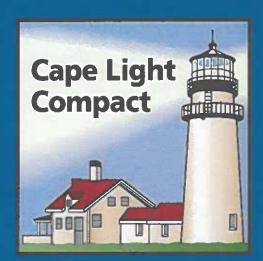
Vacancy Data

- Massachusetts has a 9.3% vacancy rate
- The Cape and Vineyard have a 48% vacancy rate
- A DNV memo from 2022 found that "areas with higher vacancy tend to have lower location participation rates. Therefore, the higher proportion of vacant homes in Cape Light Compact's territory would lead us to expect a lower Location Participation Rate there than in the rest of the state."



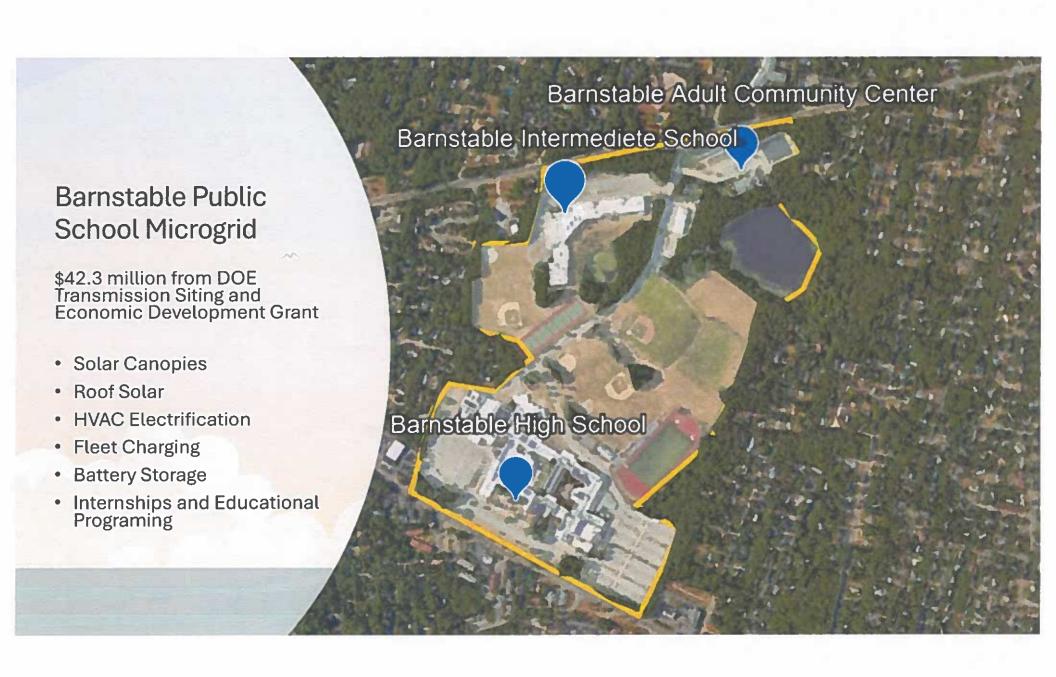


Questions?



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Barnstable Microgrid



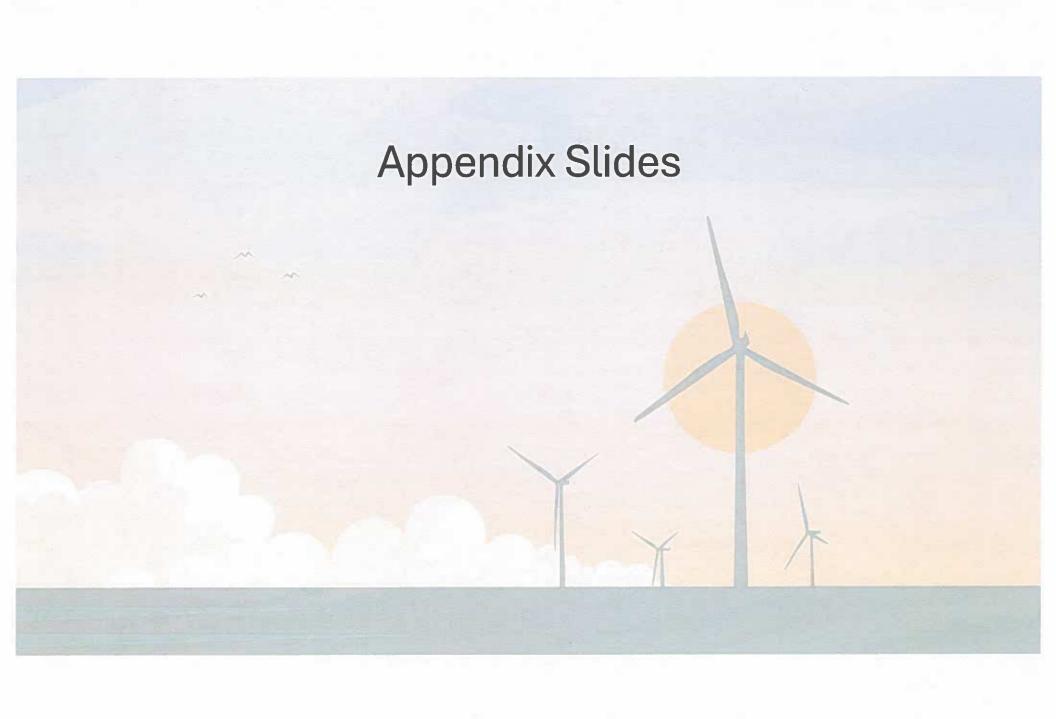
Barnstable Renewable Powered Microgrid Project

At The Barnstable High School and Intermediate School Complex

- Onsite solar and HVAC electrification
 - Dramatically reduces energy cost & improves student health by reducing absences due to illness from respiratory diseases
- Paid Internship Program
 - Funded by savings in energy costs, increasing equity for students from Justice40 Communities, targets subject matter expertise in renewable energy & climate resilience
- Improved community resilience
 - Expanded emergency shelter with backup battery storage, in addition to economic, social, and health impact

Benefits & Outcomes

- GHG reduction: 92,790 metric tons CO2e
- GHG Social Cost Reduction: \$17,630,000
- Internship Lifetime Earning Benefit: \$122,400,000
- Air Quality Lifetime Earnings Impact: \$293,760,000
- Electricity Savings: \$24,989,937
- Natural Gas Savings: \$7,800,000
- Demand Response Revenue: \$6,000,000
- Emergency Shelter Expansion: 325%
- 30 Year Project Economic Impact: \$472,579,937



Building Electrification

- Old heating systems will be replaced (bye bye boilers)
- All buildings will have year-round climate control (AC)
- Electricity consumption will increase from 2.8 million kWh to 4.4 million kWh
- 370,000 therms of gas will be eliminated

Energy Production



7 acres of parking lots give ample solar canopy space



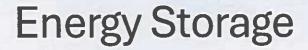
Middle School can support 600 kw roof solar



Tradition and nontraditional wind turbines will be explored but are not vital



4.4 million kWh of production is feasible



- A 1 MW, 4.4 MWh battery recommended but a more detailed study is required to properly size
- Potential Technologies
 - Flywheel Energy Storage
 - Iron Flow Battery
 - Lithium Ion
 - Hydrogen Fuel Cell

Educational programming

- The microgrid will serve as a learning lab
 - Students will be able to monitor energy production and use in real time
 - Teachers will be able to visit sections of the microgrid to show real life examples of applied physics and chemistry
- Cape Cod Community College has agreed to provide educational programming support

Internships and Career Development

- Energy savings will support paid internships for students
- Cape Light Compact has agreed to host interns for energy audits
 - By participating in energy audits, students will expand knowledge of CLC energy incentives in the community
- The CCRTA has agreed to provide low / no cost transport for our student interns
- The Massachusetts Building Trades Union will host a career fair at the schools. The microgrid will provide a concrete example of the work they do and the careers our students can have

GHG Emissions Calculation

Electricity Emissions Avoided Using EPA Conversions

GHG Emissions = 2.8 million kWh×(0.404 metric tons CO2)/(1000 kWh)=1,131 metric tons CO2e

Natural Gas Emissions Avoided

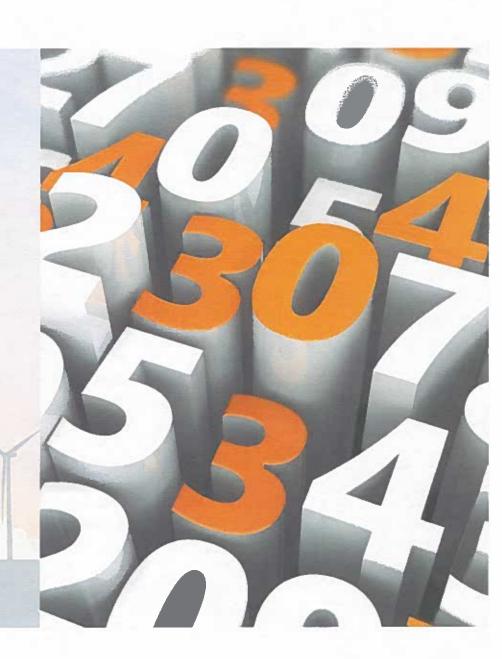
GHG Emissions=370,000 therms×(0.0053 metric tons CO2)/therm=1,961 metric tons CO2e



GHG Social Cost

Using EPA cost of \$190 per CO2e 3,093 CO2e avoided energy emmissions

- At \$190/ton CO2: \$190 * 3,093 = \$587,670 annually
- \$17,630,100 over 30-year life of project



Energy Savings

• 30 year Period

2% Yearly Electricity Escelation

 No gas projection as this is a more difficult value to predict. For simplicity held constant.

• Electricity Savings: \$24,989,937

Natural Gas Savings: \$7,800,000

3 Year	High	Middle	Community	Total
Average	School	School	Center	
Use (2021-				
2023)				
Electricity	1,790,099	965,760	69,843	2,825,702
(kWh)				
Gas	283,298	67,081	8,431	358,810
(therms)				

Learning Loss Reduction Economic Impact

- American Lifetime Income of \$1.7 million (Anthony P. Carnevale, 2014)
- Average Student Loses 14 Days of Class (Goodman, 2014)
- These absence reduce lifetime earnings by 1-2%, to be conservative I used 1% (Sarah Cattan, 2022)
- HVAC Upgrades can reduce absences by 24% (M. J. Mendell, 2013)
- Learning Loss Cost Reduction=((1.7million×0.01 earning penalty))×0.24 absence reduction impact×2,400 students=\$9,792,000 per graduating cohort
- Over a 30-year service life this translates into aggregate wage gains of \$293,760,000



Internship Benefits

Internships can increase lifetime earnings by 6% (Siedler, 2019)

Earnings
Benefit=\$1,700,000*0.06*40
students*30
years=\$122,400,000

References

- Anthony P. Carnevale, S. J. (2014). The College Payoff. Georgetown Center on Education and the Workforce.
- Goodman, J. (2014). LAKING OUT: STUDENT ABSENCES AND SNOW DAYS AS DISRUPTIONS. Cambridge: NATIONAL BUREAU OF ECONOMIC RESEARCH.
- M. J. Mendell, E. A. (2013). Association of classroom ventilation with reduced illness absence: a prospective study in California elementary schools. Indoor Air.
- Sarah Cattan, D. A. (2022). THE LONG-TERM EFFECTS OF STUDENT ABSENCE: EVIDENCE FROM SWEDEN. The Economic Journal.
- Siedler, T. (2019). Do Internships Pay Off? The Effects of Student Internships on Earnings. IZA Institutue of Labor Economics.

2024 Operating Budget Expense Report Through 10/17/2024

ORG	OBJECT	ACCOUNT DESCRIPTION		ORIGINAL APPROP		REVISED BUDGET		YTD EXPENDED		ALABLE BUDGET	% USED
01001	5110	OP-SALARIES	\$	136,500.00	\$	136,500.00	\$	103,165.44	\$	33,334.56	75.60
01001	5119	OP-SALARY RESERVE	\$	5,000.00	\$	5,000.00	\$	-	\$	5,000.00	0.00
01001	5171	OP-RETIREMENT	\$	27,000.00	\$	27,000.00	\$	14,108.38	\$	12,891.62	52.30
01001	5173	OP-GROUP INSURANCE	\$	18,500.00	\$	18,500.00	\$	15,388.05	\$	3,111.95	83.20
01001	5174	OP-MEDICARE/OTHER TAXES	\$	2,000.00	\$	2,000.00	\$	1,425.86	\$	574.14	71.30
01001	5175	STATE UNEMPLOYMENT INSUR	\$	621.00	\$	621.00	\$	158.08	\$	462.92	25.50
01001	5179	OP-MISC FRINGES	\$	250.00	\$	250.00	\$	27.00	\$	223.00	10.80
01001	5181	OP-OPEB LIABILITY	\$	16,990.00	\$	16,990.00	\$	-	\$	16,990.00	0.00
01001	5210	OP-UTILITIES	\$	250.00	\$	250.00	\$	82.17	\$	167.83	32.90
01001	5270	OP-MISC RENTALS	\$	600.00	\$	600.00	\$	438.07	\$	161.93	73.00
01001	5272	OP-RENT	\$	6,210.00	\$	6,210.00	\$	4,657.50	\$	1,552.50	75.00
01001	5290	OP-CUSTODIAL SERVICES	\$	2,000.00	\$	2,000.00	\$	1,477.45	\$	522.55	73.90
01001	5301	OP-ADVERTISING	\$	55,000.00	\$	43,500.00	\$	31,972.68	\$	11,527.32	73.50
01001	5302	OP-PUBLIC MARKETING SUPPO	\$	25,000.00	\$	25,000.00	\$	11,943.68	\$	13,056.32	47.80
01001	5309	OP-IT SERVICES	\$	2,000.00	\$	2,000.00	\$	2,004.84	\$	(4.84)	100.20
01001	5313	OP-STAFF PROFESSIONAL DEVE	\$	5,000.00	\$	5,000.00	\$	661.14	\$	4,338.86	13.20
01001	5314	OP-PAYROLL SERVICES	\$	250.00	\$	250.00	\$	112.22	\$	137.78	44.90
01001	5315	OP-LEGAL SERVICES	\$	310,000.00	\$	485,000.00	\$	323,412.00	\$	161,588.00	66.70
01001	5316	OP-AUDIT FEES	\$	7,500.00	\$	7,500.00	\$	2,187.37	\$	5,312.63	29.20
01001	5318	OP-TREASURY SERVICES	\$	12,000.00	\$	12,000.00	\$	2,913.12	\$	9,086.88	24.30
01001	5319	OP-CONTRACTUAL	\$	45,000.00	\$	45,000.00	\$	14,881.98	\$	30,118.02	33.10
01001	5320	OP-OUTREACH/MARKETING CO	\$	35,000.00	\$	35,000.00	\$	10,582.74	\$	24,417.26	30.20
01001	5341	OP-POSTAGE	\$	7,500.00	\$	7,500.00	\$	6,271.71	\$	1,228.29	83.60
01001	5343	OP-TELEPHONES	\$	1,200.00	\$	1,200.00	\$	1,115.26	\$	84.74	92.90
01001	5344	OP-INTERNET	\$	2,500.00	\$	2,500.00	\$	781.59	\$	1,718.41	31.30
01001	5345	OP-PRINTING	\$	12,500.00	\$	12,500.00	\$	10,937.87	\$	1,562.13	87.50
01001	5400	OP-SUPPLIES	\$	1,600.00	\$	1,600.00	\$	457.47	\$	1,142.53	28.60
01001	5430	BUILDING RENOVATIONS	\$	-	\$	1,500.00	\$	1,371.33	\$	128.67	91.40
01001	5490	OP-FOOD SUPPLIES	\$	6,500.00	\$	6,500.00	\$	3,395.60	\$	3,104.40	52.20
01001	5710	OP-TRAVEL IN STATE	\$	5,000.00	\$	5,000.00	\$	3,164.17	\$	1,835.83	63.30
01001	5720	OP-TRAVEL OUT STATE	\$	8,000.00	\$	8,000.00	\$	5,595.59	\$	2,404.41	69.90
01001	5730	OP-SPONSORSHIPS	\$	51,000.00	\$	61,000.00	\$	57,811.04	\$	3,188.96	94.80
01001	5731	OP-SUBSCRIPTIONS	\$	25,000.00	\$	25,000.00	\$	21,449.00	\$	3,551.00	85.80
01001	5732	OP-SOFTWARE LICENSES	\$	2,100.00	\$	2,100.00	\$	2,160.76	\$	(60.76)	102.90
01001	5741	OP-INSURANCE	\$	5,000.00	\$	5,000.00	\$	3,614.98	\$	1,385.02	72.30
01001	5789	OP-UNPAID BILLS	\$	500.00	\$	500.00	\$		\$	500.00	0.00
01001	5850	OP-MISC EQUIPMENT	\$	1,000.00	\$	1,000.00	\$	678.39	\$	321.61	67.80
01001	5854	OP-FINANCIAL SOFTWARE SYST	\$	3,900.00	\$	3,900.00	\$	-	\$	3,900.00	0.00
		Grand Total	\$	845,971.00	\$	1,020,971.00	\$	660,404.53	\$	360,566.47	64.70

January-September 2024 Mil Adder Revenue: \$790,622.14