

Alternative Energy Committee

Quarterly Report to the Board of Selectmen

March 10, 2020



**Town of
Cohasset
Massachusetts**

**Alternative
Energy
Committee**

Contents

Objective: Provide the Q12020 quarterly report of the Alternative Energy Committee to the Board of Selectmen

Agenda:

- Alternative Energy Committee
- Solar Update
- Community Choice Electric Aggregation
- Microgrid Resiliency Project
- Green Communities
- Thank you!



Alternative Energy Committee – Goals/Objectives

- Investigate and identify alternative energy resources and opportunities for municipal energy efficiency and resilience;
- Support the Town Manager and his staff in exploring grants and procurement options that **maximize safety, energy efficiency, and reduced emissions**;
- Investigate **community-wide, residential and business**, energy efficient and clean energy options;
- Contribute to **public awareness** and **education on Town initiatives** and long-term benefits of achieving Cohasset's strategic energy efficiency objectives;
- Together with the Town Manager, report to the BOS quarterly on the Town's progress and the cost-saving benefits of meeting the objectives of the Green Community status and other energy-based policies that benefit the Town and its citizens; and
- Support other committees, as requested by the Board of Selectmen.

The new charge reaches out to benefit citizens of the Town



Alternative Energy Committee - Members

The Alternative Energy Committee shall consist of seven members of the public plus a liaison from the Town with “demonstrated interest and relevant skills:”

- **Tanya Bodell (Chair)** – more than 25 years serving as an advisor to companies in the energy industries; former chair of the AEC 2011-2013
- **Patricia Gooding (Vice Chair)** – returning to the committee for her fourth year, played a crucial role in bringing Cohasset energy consumption data into the Green Communities database
- **Steve Wenner** – longest standing member of the AEC since 2012 as a champion of solar, Green Communities and now community aggregation
- **Mary Jo Larson** –an international facilitator of complex issues and former AEC chair
- **Bill Fusco** – advocate for alternative energy and what it can do for the future
- **Michael Schmitt** – worked at Pilgrim Nuclear Plant, Eversource, and now Hull Municipal Light Plant
- **OPEN SEAT** – To be filled

Other Key Players: Debbie Cook, Michelle Leary



Alternative Energy Committee – Projects and Champions

The AEC members all have projects/responsibilities that they are championing:

Project	Bodell	Gooding	Wenner	Larson	Schmitt	Fusco
Community Choice						
Microgrid						
Town Hall						
Wildflowers on Array						
Solar Array(s)						
Solarize Plus						
Green Communities						

Future meeting with the BOS Chair to discuss priorities and focus

Solar Update – Savings ongoing more than 2 years later!

PRODUCTION

1,481K kWh

WOULD SATISFY THE ANNUAL
ELECTRICITY NEEDS OF
205 HOMES

SAVINGS

\$144K

AVERAGES \$4,810 PER MONTH,
OR \$160 PER DAY

CO₂ REDUCTION

1,279K LBS

TYPICAL NON-SOLAR SOURCES IN
MA WOULD HAVE PUT 1.2M LBS
OF CO₂ INTO THE ATMOSPHERE



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Community Choice – Next Steps

KEY PROGRESS

- **Consultant Contracted** - Town signed contract with Good Energy
- **Plan Completed** – Plan finalized for review
- **Public Review** – DOER requires that citizens have 2 weeks to review the plan and provide comments/input at public meetings (2 weeks)
- **Plan Submitted for Review** – Good Energy submits the plan to the DOER and DPU for review
- **DOER Review** – DOER reviews the submitted plan (6 – 8 weeks)
- **DPU Review** – DPU reviews the submitted plan (6 – 8 months)

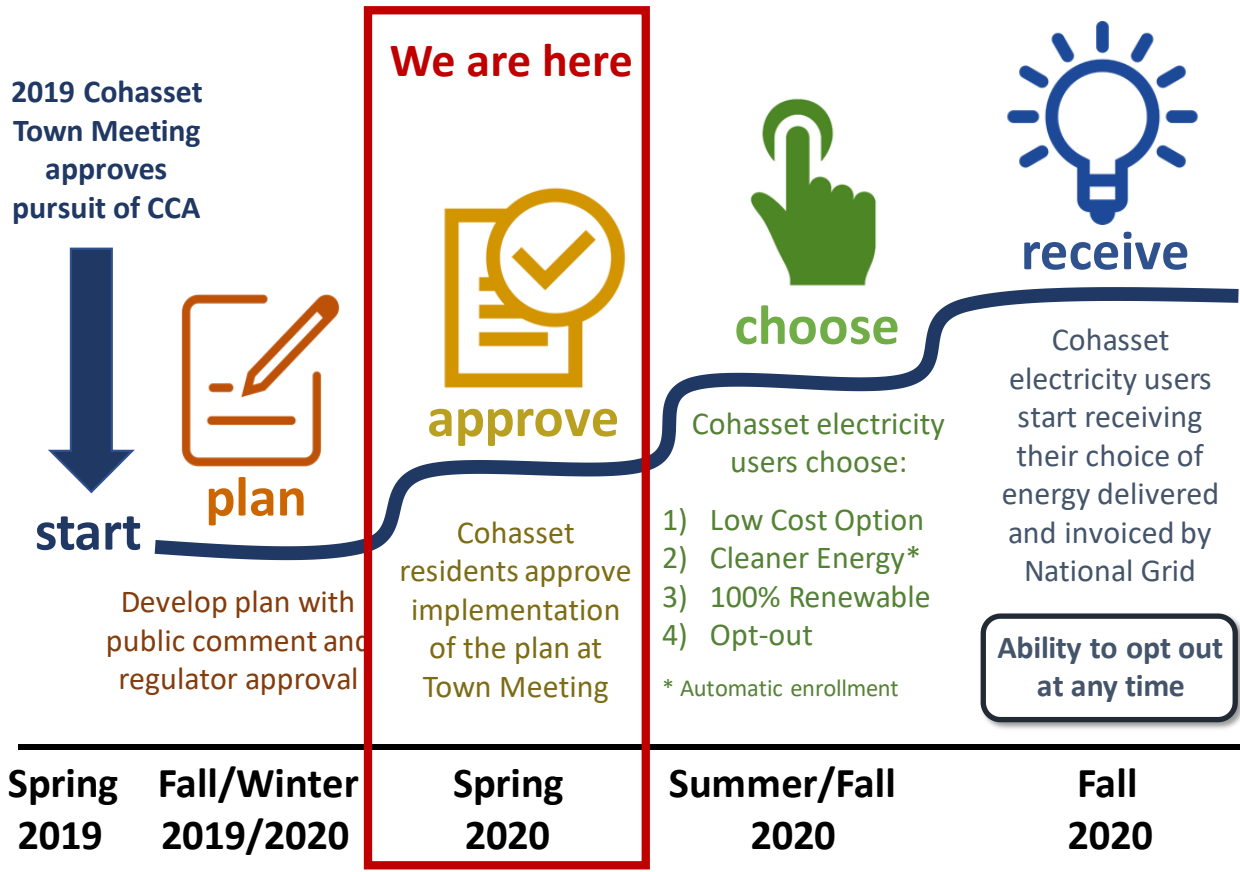
NEXT STEPS

- **TOWN MEETING** – Cohasset citizens vote to proceed with Plan

BOS needs to vote whether to recommend implementation



Community Choice - Timeline



Plan submitted to the DPU for review; implementation requires Town approval



Community Choice – Lots of marketing and more to do

Town organization or Marketing channel	Main message	Format	Date	Who's leading	Status
Special Town Meeting	BOS & AEC bring green CCA to Cohasset	Poster Presentation	Nov 4, 2019	Tanya	Completed
Middle School Students & Parents	AEC brings renewable energy to Cohasset	Interviews & Student Presentations	Nov 12 & Nov 21	Mary Jo, Steve, Kathy Cerruti	Completed
BOS Meeting	Two-week Comment Period announced	BOS motion	Nov 26, 2019	Tanya, Steve W.	Completed
Cohasset143 Facebook Page	CCA Comment Period Introduction	Social Media	Nov 26, 2019	Steve W.	Completed
BOS Webpage	CCA Plan with Summary & FAQs	File Attachments	Nov 27, 2019	Town staff	Completed
Cohasset Mariner	"Cohasset seeking public comments for its electricity aggregation plan"	Newspaper article	Dec 5, 2019	Mariner reporter	Completed
Board of Selectmen	Residents invited to comment	Email	Dec 5 - Dec 18	Town staff	Completed
Cohasset Mariner	"Cohasset's alternative energy plan is made public"	Newspaper article	Dec 23	Mariner reporter	Completed
Water Bill Insert	Come to ATM and support CCA!	Envelope stuffer	Jan 31	Debbie & Steve	Completed
Get-out-the-Vote Campaign	CCA is a great Electricity Plan!	Door knocking	6 days in February	Steve W.	230+ homes visited
"Life on the Rocks"	BOS propose a great Electricity Plan!	Local publication	April 15	Debbie & Steve	Scheduled
Old Goats	CCA: what it is and why you will love it!	Civic group presentation	April 16	Steve W.	Scheduled
Cohasset143 Facebook Page	Residents to vote on CCA implementation	Social Media	April 26	Debbie & Steve	2 Planned posts
Cohasset Mariner	Intro to CCA and ATM article	Newspaper article	mid-April	Debbie & Steve	2 Planned articles
Rotary	CCA: what it is and why you will love it!	Civic group presentation	mid-April	Debbie & Steve	Possible
Chamber of Commerce	CCA: what it is and why you will love it!	Civic group presentation	late-April	Steve W.	Possible
Senior Center	CCA: what it is and why you will love it!	Civic group presentation	late-April	Steve W.	Possible



Community Choice – Informational Summary

INFORMATIONAL SUMMARY:

At Cohasset’s 2019 Annual Town Meeting voters passed Article 16 for Electrical Billing Aggregation to authorize the Board of Selectmen to develop a plan to seek out and negotiate electric services for Cohasset municipal facilities, residences and businesses at discounted rates. Details of the plan are available in the Town Hall and on the Board of Selectmen’s web page. The objective is not simply to save residents money on their electricity bills, but also to offer inexpensive options for the purchase of renewable energy. All residents will have the opportunity to participate and benefit, or they may opt out if they so desire.

Last year’s article also specified that before implementation any aggregation plan would require further Town Meeting approval. Passage of this year’s Article 18 will allow the Board of Selectmen to proceed with the solicitation and evaluation of bids. The evaluation will be based on criteria set by the Municipality, including price, term and source. If none of the bids is acceptable, the Board of Selectmen may repeat the solicitation, or choose not to launch the aggregation.



Community Choice – Warrant Article

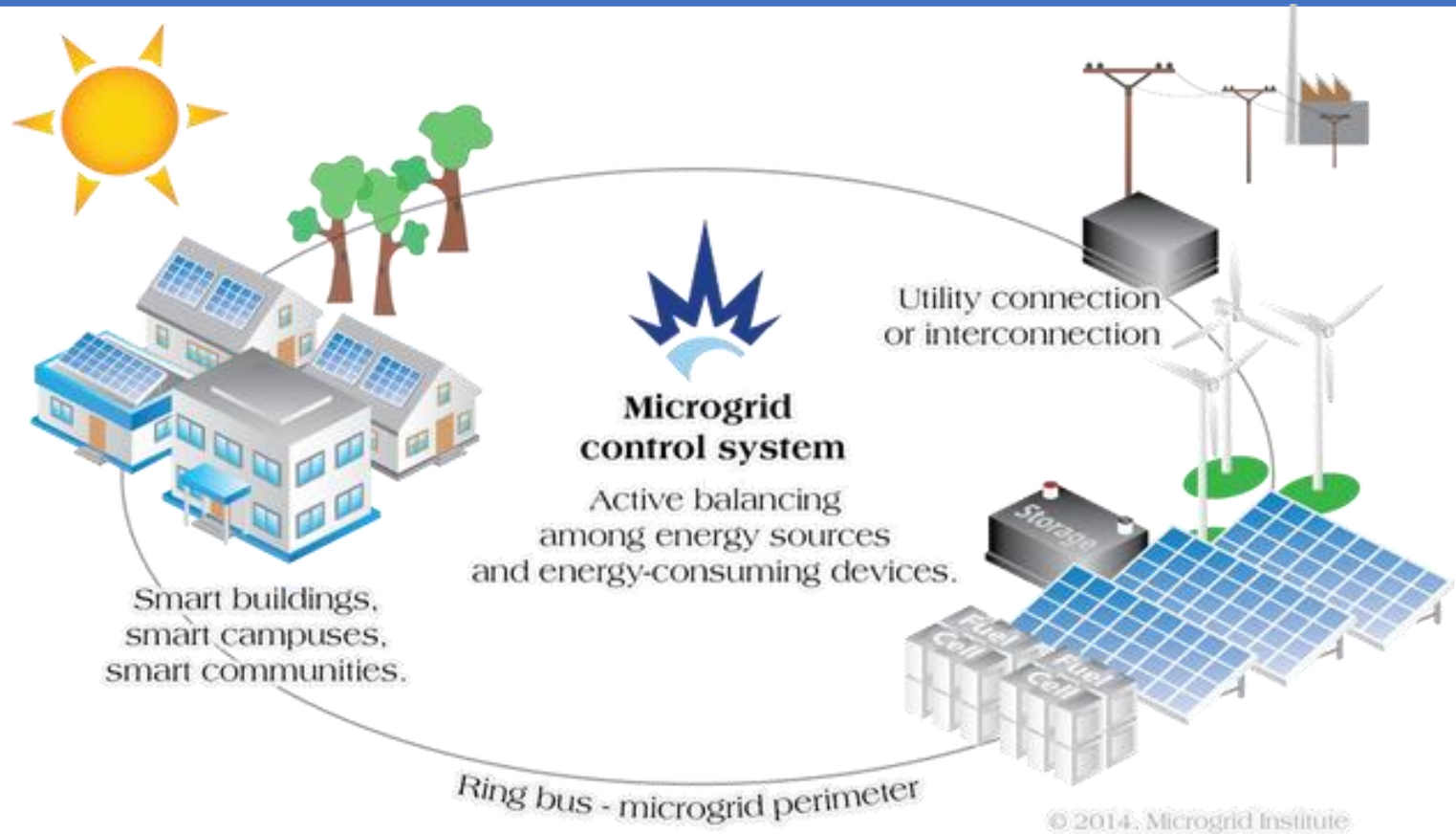
ARTICLE 18: IMPLEMENTATION OF THE COHASSET COMMUNITY CHOICE ELECTRICITY AGGREGATION PLAN

To see if the town will vote to take further action to implement the action voted by the Town pursuant to Article 16 of the 2019 Annual Town Meeting (by which vote the Town Manager and the Board of Selectmen, or their designee, were authorized to exercise the authority granted under M.G.L. c. 164, s. 134 “Load Aggregation Programs” to initiate a process for the aggregation of the Town’s total electric power load, municipal and private, commercial and residential, and as a consequence thereof to allow for the entering into a contract or contracts, alone as a Town or in concert with a group of other municipalities, for the aggregated purchase of electric utility service and related services on behalf of the Town and on behalf of all private commercial and residential ratepayers in the Town subject to further action by town meeting to approve a specific aggregation plan) by taking the following additional actions:

1. to approve and adopt the Cohasset Community Choice Electricity Aggregation Plan on file with office of the Town Clerk and the Board of Selectmen and available on the Town Manger's web page,
2. to authorize the Board of Selectmen to implement such Cohasset Community Choice Electricity Aggregation Plan, subject to the Board deciding, upon review and evaluation of the competitive proposals received from energy suppliers, that the best proposal will be beneficial for the residents and businesses of Cohasset, and further subject to any applicable statutory processes and procedures for electrical aggregation being implemented as are set forth in said c.164, s.134 that includes but not limited to the certification of the state Department. of Energy Resources as set forth in said c. 164, s. 134, or
3. to take any other action related thereto.



Microgrid – A network of assets at the distribution level



Microgrids can be buildings, campuses, or communities



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Microgrid – Requires a network of partners

National Grid	Microgrid Owner/Operator	Grants/Funding	Feasibility/Plan
<ul style="list-style-type: none"> • Owns distribution wires • Directly benefits from a controllable microgrid • Would have to modify tariffs to pass through benefits to asset owner/operator <ul style="list-style-type: none"> – Capacity market share – Clean peak standard • Can roadblock Town efforts, including the municipal light company option 	<ul style="list-style-type: none"> • Technology already exists • Companies already sell the microgrid equipment <ul style="list-style-type: none"> – Distributed generation – Storage – Switches – Software • Microgrid management business model under development 	<ul style="list-style-type: none"> • Hot topic in the electricity industry • Industry interest in using microgrids to create resiliency • Monitoring potential funding/demonstration project opportunities <ul style="list-style-type: none"> – DOE (\$30 million for 11 municipal projects) – MassCEC (\$75,000) – Green Communities 	<ul style="list-style-type: none"> • Identify potential sites for generation/ storage: <ul style="list-style-type: none"> – Existing back-up generator sites – Solar energy array – MBTA canopy solar project – Police/Fire/Town Hall/Sewer/Water • Obtain town approval to lease sites for PPA-like arrangement

Status:
 Meeting 3/30/2020 In talks with Vendors Pursuing grants Can start now

Biggest challenges: Utility buy-in, business model and funding

Microgrid – Potential sites that could locate assets



Town-owned sites are exactly where the microgrid would be



Microgrid – Pre-approval to lease town sites would help

- Deer Hill / Osgood
 - Existing backup generation site (leased diesel units)
 - Could be used for battery storage facility (active only in emergencies)
- Cohasset High School/Middle School Roofs
 - Need to renew Town approval given in 2011
 - Roof is approaching end of life
 - Timing with tax credits is important
- Police/Fire Department
 - Existing backup generation site
 - Potential storage site
 - Could put solar on roofs
- Senior Center
 - Existing site for backup generation (gas-pipeline)
 - Could be used for battery storage

Chapter 30B requires Town approval to lease land for solar / storage



Green Communities Grants

Green Communities funding will be modified in the coming years. Grants are now limited to \$200,000, and for communities that have received over \$750,000 in competitive grants (not including your designation grant), the limit is \$100,000.

Thus far Cohasset has received the following competitive grants. Therefore, we are still eligible to apply for \$200k.

\$141,460	2015 designation grant
\$166,215	2017 competitive grant
<u>\$193,122</u>	<u>2019 competitive grant</u>
\$500,797	TOTAL to date

We will be submitting the maximum request this year of \$200,000:

- Improving efficiency of the High School/Middle School Air Handlers

Cohasset is eligible to and will apply for \$200,000 in grants



Thank you to our Town Manager!



Town Talk: How Municipalities are Powering Up

Come hear local municipalities and regional utilities discuss how Towns are giving power to the people. Whether installing or purchasing renewable energy, aggregating town load, pursuing electric vehicles and installing charging stations on town parking lots, Massachusetts municipalities are taking the lead in ushering in the new energy economy. The impact on the distribution system already is being felt, causing National Grid to place a halt on new solar energy arrays until further studies are complete. A ban on natural gas in new buildings promises even more disruption to traditional utility business models. Where will the towns lead us and how will it end?

NECA Welcomes as our Dinner Speakers:



Moderator: Shaela McNulty Collins, Director of Regulatory Policy, Columbia Gas of Massachusetts
Tim Roughan, Director of Energy and Environmental Policy, *National Grid*
Tommy Vitolo, State Representative, Town of Brookline
Christopher Senior, Town Manager, Town of Cohasset

Chris's great discussion spurred conversations with Ameresco and National Grid on a microgrid project

Chris Senior did an AMAZING job representing Cohasset on January 9th



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Questions

