

Town of Harvard Energy Advisory Committee

BRIAN SMITH – CHAIR
DAVID FAY
FORREST HODGKINS
PETER KELLY-JOSEPH
ELLEN SACHS-LEICHER

ASSOCIATE MEMBERS:
STUDENT MEMBER:
LIAISONS:

GUY HERMANN
OPEN
KARA MINAR, SELECT BOARD
SUSANMARY REDINGER, SCHOOL COMMITTEE
SHARLENE CRONIN, CAPITAL PLANNING
TBD, FINANCE COMMITTEE
GUY HERMANN, PERMANENT BUILDING COMMITTEE

Meeting Minutes 5/10/23

Attendees: B. Smith, D. Fay, F. Hodgkins, E. Sachs Leicher, Guy Hermann, SusanMary Redinger, Catherine Warner

Location: This Meeting was held virtually in accordance with Chapter 2 of the Acts of 2023, An Act Making Appropriations for the Fiscal Year 2023 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects, and signed into law on March 29, 2023

Zoom Meeting ID: 881 9802 4820

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| Admin | 1. HEAC approved the minutes of 4/19 4-0 with comment. |
| Guests | 2. Catherine Warner is concerned that the Town needs a new/revised Lighting Bylaw to bring to Town Meeting in the Fall. The Planning Board does not have the bandwidth to pursue. She requested support from HEAC in this effort. HEAC members can support the effort and can help review but are not able to lead the effort. |
| Membership | 3. A motion was made to vote to recommend to the Select Board to appoint Guy Hermann an Associate Member of HEAC. The motion passed 5-0. |

1	Goal: Decarbonization Plan – Reduce Emissions	Lead: Brian	Support: Ellen
	Action	Status	Next Step
	1. Municipal Decarbonization plan – finalize plan by May 2023	Initial review by stakeholders with review of climate plan complete	1. The Municipal Decarbonization plan will be revised as final prior to the end of May. 2. Stakeholder meeting – Brian set up with Town/Schools – Stakeholder meeting will be set up for the Municipal Decarbonization Plan review with Tim Bragan and Marie Sobalvarro prior to the end of May.
	3. Community Decarbonization plan – finalize by May 2023	Initial review by key personnel complete	1. The Municipal Decarbonization plan will be revised as final prior to the end of May. 2. Stakeholder meeting – Brian set up with Town/Schools – Stakeholder meeting will be set up for review with Tim Bragan and Marie Sobalvarro prior to the end of May. The Community plan will be included but the primary focus will be the Municipal Plan.

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2	Goal: Buildings – Electrification Plan; Assessment / Energy Reduction Projects	Lead: Forrest	Support: Brian/David
	Action	Status	Next Step
	<p>1. Develop a detailed long-range plan for strategic building electrification, with financial analysis, to upgrade municipal building heating systems.</p> <p>Parallel tracks</p>	Not started.	<p>Develop and issue RFP by Nov 2022.</p> <ol style="list-style-type: none"> Brian ask John Snell about grant for RFP. Forrest ask DOER about Technical Assistance grant. Investigate MVP grant. <p>Obtain funding and target plan by Sep 2023.</p> <ol style="list-style-type: none"> NGRID funded an Electrification Assessment performed by B2Q (via NGRID) at no charge. The focus will be to replace the Bromfield heating system which is the biggest source of emissions. 2/8 - B2Q report provided 3 options: (1) Air to Air VRF Heat Pump System (adds cooling) (2) Air to Water Heat Pump System (3) Water Source Geothermal Heat Pump System Forrest reviewed a list of pros/cons for at a meeting with Schools (Linda Dwight, Patrick Harrigan and SusanMary Redinger). The Schools selected an option to install air to air heat pumps to be installed into the rooftop units. This option ensure continuity of ventilation service and adds AC. The incentives are lower for this option. Next Step – Issue RFP for a detailed design to be performed in accordance with the recommended heat pump option. It is recommended that this work should be coordinated with any plans for a new roof or solar PV. Bromfield RTU replacement – School Committee submitted a plan for \$3M to replace a large number of units. – on hold pending heat pump option. Building Electrification plan – goal to eliminate fossil fuels for space heating. Focus TBS, Town Hall and Public Safety building.

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	2. Define objective of audits – electrification vs. efficiency.	Working to have audits performed at no charge – no options yet	1. Coordinate with TBS building study.
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3	Vehicles – Convert to Electric Vehicles	Lead: Peter	Support: Forrest
	Action	Status	Next Step
	1. Prepare Town Vehicle Inventory. Coordinate with NGRID Fleet Advisory program consultant.	Inventory complete. Report and implementation plan in process.	1. Review Fleet Electrification report and recommendations. Review with Town Staff by Oct 2022. – Draft report being reviewed. The ICF study will be used as a reference. Remove this item. 2. Discuss info gap about vehicle use, miles, lifecycle cost, etc. – a. Ford Hybrid Interceptor – wait until Feb – in process b. CPIC – electric vehicle for future; wait until IRA incentives c. School \$15k electric vehicles – to replace existing COA vans; Ford E350 – replace existing vehicles for attrition. Replace CASE older vans. Typically have 2 consistently. Evaluate IRA option. Aligned with Fleet Electrification plans. CPIC will evaluate. Fully support.
	2. Identify candidates for replacement in short term.	Initially replacing police vehicles with Hybrids. Consider conversions to Hybrid of light or medium-duty vehicles.	Work with Tim Bragan and town staff to select vehicles. Plug in Hybrid retrofits available for medium duty trucks Peter requested Dept heads to identify vehicle replacement candidates. Initially Police and recently Fire Chief is interested in hybrid option.

4	Vehicles – Charging Stations	Lead: Brian	Support: Peter
	1. Create Charger Plan for Town use on Town property.	Feasibility reviews performed by ECI. Chargers are only partially funded if not public use.	Focus on Public Safety Building. 1. Obtain quote for Fast charger from ECI for police cruisers. – ECI to schedule a site visit and prepare a proposal. Can the new transformer supply multiple chargers? – Brian to set deadline for ECI proposal. – end May 2023 2. Determine if build-out (or any) will exceed electric supply?

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	2. Create Charger Plan for public use on Town property	Feasibility reviews performed by ECI. DC Fast chargers are only partially funded.	<ol style="list-style-type: none"> 1. ECI to process application to NGRID for certain locations. Focus on HES #2/TBS. Any data on usage? 2. Brian to issue latest plan. 3. Priority - Bromfield Level 2 Charger in back. School committee suggest installing one charger at Bromfield. Brian to set deadline for ECI proposal. (Height of charger at HES is ADA issue – SusanMary provided a recent ADA report highlighting the issue).
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5	Green Community Program – Meet Obligations and Maximize Grants	Lead: Brian	Support: Forrest/David
	Action	Status	Next Step
	1. 2022 Block 2 Competitive grant.	In process	<p>Library Weatherization Phase 2 and Vehicle Police Hybrid were the only 2 items on the application.</p> <p>1/3/23 – DOER awarded GC Grant for \$10,000 for hybrid car and \$17,173 for Library Weatherization.</p> <p>4/19 – Goal - Library project to be done end May and close grant end of June.</p>
	Fall 2023 Block 2 Grant project ideas	Target list of project by Aug 2023.	<ol style="list-style-type: none"> 1. Bromfield pilot classroom project – Univent? 2. Vehicles – EV and Hybrid; Peter will reach out to Tim Bragan to determine if there are any planned purchases that can take advantage of a green community grant to be applied to a future purchase in Feb 2024.
	2. Specialized MA Stretch Building Code –Adopt in 2023.	Reviewing impact with key stakeholders	<p>Determine path forward. Create plan by Dec 2022. Goal to bring to Town Meeting for Spring 2023. DOER issued revised Specialized Stretch Building Code for public comment. Focus is on net zero buildings.</p> <p><u>Plan of action</u></p> <ol style="list-style-type: none"> 1. Plan for warrant Fall 2023. 2. Ellen is arranging to speak with the Sustainability Coordinator for the Town of Weston (Julie Gagen) regarding the Optional Stretch Code and implementation. The goal is set up a presentation for key Town Committees. – Ellen and Brian reviewed the plan with Julie Gagen and determined it would be helpful arrange an introduction meeting with other

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			committees in Town. → planned for 5/22
	3. Hire Municipal clean energy coordinator. (e.g., Sustainability Coordinator, Energy Manager)	No work yet.	Define role and plan by Jun 2023. Evaluate options – shared or dedicated. - Ellen sent Draft Sustainability Job Description sent to HEAC for review. – Description, Brian to review and plan to submit for Town budget; combine with a grant writer position. – On Hold due to budget concerns.
6	Renewable Electricity – Solar Photovoltaic Systems	Lead: David	Support: Brian
	Action	Status	Next Step
	1. SB Green Initiative Goal 1) Utilize the capital fund for at least one solar PV project on a town-owned building	Priority 1 - New COA	<p>COA; PBC working with Energy Sage as a PV system broker. Need a commitment from the Town. Working to determine the electric demand. IRA direct 30% ITC makes direct purchase more attractive. Town Meeting article approved for \$170k for direct purchase.</p> <p>Public Safety – The solar PV system is on hold pending replacement of a new roof within 10 years.</p> <p>Bromfield - Reviewed Bromfield with Patrick Harrigan – new roof planned within 5 years. Canopies are not ideal. There have been concerns about some roof areas. Next Step – find out roof timing. – Request details from SusanMary. Will need a study to evaluate concerns. SusanMary will review with School Committee.</p> <p>1. Solar PV Strategy – HEAC reviewed David’s draft document and provided comments to be reviewed and formalized – see attached. – the strategy is revised and David will send around for further review. Brian and David to review with Kara Minar. pending</p> <p>2. New Field Complex – consider if there are any opportunities to add solar PV.</p>
	2. SB Green Initiative Goal 2) Meet with HEAC on the status of their investigation into a municipal solar panel field to generate revenues	Solect confirmed Stow Road gravel pit good for solar PV.	1. Obtain PPA proposal from Solect. – Pending Also part of Revenue Ideation committee. Solect has assigned a new replacement for Steve Clairmont, Byron Woodman. David reviewing with Kara to highlight this project on the Revenue committee.

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			2. Landfill Solar PV – DEP will require the Town to follow landfill closure requirements which requires monitoring wells. Forrest suggested that the cost of closure could be rolled into a Solar PV PPA. David will contact Solect and Tighe and Bond (via Tim Bragan) to determine if this is possible.
	3. Prepare overall solar PV strategy.		1. David revise strategy document to make a recommendation. Incorporate decisions for ownership model – when to buy vs PPA. Include plans for all viable systems for planning use by Town/CPIC. Include percentages for electric allocation from solar PV/ net metering credits and plan for future usage. 2. Brian prepare draft presentation for review with the Select Board 3. Determine requirements for new buildings such as DPW and Fire Station.
	4. Evaluate solar PV feasibility of remaining property. Hire 3 rd Party?	Informal evaluation of several sites done.	Discuss need for 3 rd party quote for Town evaluation. – Kara has list of possible sites. On Hold
	5. Battery Storage - Add to HES PV system and evaluate others; evaluate funding source.	No work yet.	1. Establish project scope and owner. – Brian obtain assistance to justify project. David identified the demand charges need to be understood to justify the project (>\$15/kW).
7	Renewable Electricity – Energy Supply	Lead: Ellen	Support: David
	Action	Status	Next Step
	1. Town Procurement finalize 100% renewable supply as default option starting Nov 2022.	Completed Town selected one year term expires Nov 2023.	DOER Climate Leaders program specifies 100% Class 1 Renewable option. Include for renewal in Q3 2023.
	2. Support selection/ execution of plan expiring Nov 2023.	Marie Sobalvarro has executed renewal with Colonial Energy	The Town has agreed to a renewal for 24 months with default plan 100% renewable. New plan is Nov 23 to Nov 25.
	Net Metering Credit Purchase Agreements	Multiple offers (3) have been received due to the number of recent	1. Existing Athol array \$75k at 20% discount. 2. Advise Town Procurement on a max NMC appetite \$300k (~kWh). Max credits shall be less than the total electric consumption. Negotiate more than 10% which is \$30k of

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		interconnection of dormant projects. Std Offer is 10%; 20-year contracts.	the \$300k. Prefer a company that we have experience Oak Partners. The above recommendation will be provided by David Fay to Marie Sobalvarro to meet with the available companies. Require a cancellation clause. Voted 4-0 to make the above recommendation. – On Hold pending Select Board endorsement of Solar PV Strategy.
8	Streetlights – Replace with LED Fixtures	David	Brian
	Action	Status	Next Step
	2. Review with Historical Commission	Completed Jan-Mar 2022; Requested warmer light	Need final approval
	3. NGRID install warmer light test fixture	Warmer fixture installed in the correct location.	Determine plan for town wide fixture replacement.
		Meeting adjourned 9:30 pm (voted 5-0).	
	Future Meetings	2023: 14, Jul 12, Aug 9 HEAC Meeting Location/Time: 8 pm. – Virtual until further notice	

Other Items – HEAC is scheduled to provide a periodic report to the Select Board on May 23.