

Town of Harvard Energy Advisory Committee

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

ASSOCIATE MEMBERS:
STUDENT MEMBER:
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SUSANMARY REDINGER, SCHOOL COMMITTEE
SHARLENE CRONIN, CAPITAL PLANNING
TBD, FINANCE COMMITTEE
GUY HERMANN, PERMANENT BUILDING COMMITTEE

Meeting Minutes 11/9/22

Attendees: B. Smith, D. Fay, F. Hodgkins, P. Kelly-Joseph, E. Sachs Leicher
Susan Mary Redinger, Chief Babu, Donovan Smith, Kara Minar

Location: This Meeting was held virtually in accordance with Chapter 20 of the Acts of 2021, An Act Relative to Extending Certain COVID-19 Measures Adopted During the State of Emergency and signed into law on June 16, 2021
Zoom Meeting ID: 833 8338 9748

Admin 1. HEAC approved the minutes of 10/12/22 5-0 with comment.

1	Goal: Decarbonization Plan – Reduce Emissions	Lead: Brian	Support: Ellen
	Action	Status	Next Step
	1. Obtain DOER grant funds for consultant	Completed July 2021	NA
	2. Municipal Decarbonization plan – finalize plan by Nov 2022.	Initial review by stakeholders with review of climate plan complete	Perform another round of reviews with HEAC and stakeholders. Create implementation roadmap. 1. Waiting for John Snell implementation roadmap input. 2. Stakeholder meeting – Brian set up with Town/Schools. 3. Align with Climate Plan being finalized (SB 9/20) by end Sept. HCIC SB 9/20 meeting went well. The Climate Plan draft report is being released this week and then to be sent to the Select Board in Nov. David suggest that we have a focus on zero net energy buildings HEAC review Implementation Plan and provide comments by 11/16. Goal is to align with Climate plan. Goal to review final plan and identify steps to issue at Dec HEAC meeting.
	3. Community Decarbonization plan – finalize by Nov 2022.	Initial review by key personnel complete	Perform detailed review by HEAC, HCIC and other community stakeholders. – 1. Brian have John Snell revise plan with HEAC comments. 2. Align with Climate Plan by end Sept. Goal to review final plan and identify steps to issue at Dec HEAC meeting.

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2	Goal: Buildings – Electrification Plan; Assessment / Energy Reduction Projects	Lead: Forrest	Support: Brian/David
	Action	Status	Next Step
	1. Develop a detailed long-range plan for strategic building electrification, with financial analysis, to upgrade municipal building heating systems.	Not started.	<p>1. Develop and issue RFP by Nov 2022.</p> <p>a. Brian ask John Snell about grant for RFP.</p> <p>b. Forrest ask DOER about Technical Assistance grant.</p> <p>c. Investigate MVP grant.</p> <p>Obtain funding and target plan by Sep 2023.</p> <p>We are working with NGRID to have an Electrification Assessment performed by B2Q (via NGRID) at no charge. KOM was held with B2Q and NGRID. The goal is to apply for a DOER technical assessment grant by the deadline of Nov 18. The focus will be to replace the heating system which is the biggest source of emissions.</p> <p>Building Electrification plan – goal to eliminate fossil fuels for space heating. Focus TBS, Town Hall and Public Safety building.</p> <p>Bromfield - site review by B2Q 11/15 9 am.</p> <p>Working on a proposed scope of work to apply for DOER technical assistance grant – next step to review the B2Q study output.</p> <p>World Energy (also funded by National Grid) – walk through assessment of Public Safety and Town Hall planned for 12/5.</p>
	1. Define objective of audits – electrification vs. efficiency.	In progress.	<p>1. Coordinate with TBS building study. – Forrest find out the need from Marie for what types of audits are needed to satisfy WWTP grant requirement.</p> <p>Open issue</p>

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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.	<p>1. Review Fleet Electrification report and recommendations. Review with Town Staff by Oct 2022. – Draft report being reviewed.</p> <p>The ICF study will be used as a reference. Remove this item.</p> <p>2. Discuss info gap about vehicle use, miles, lifecycle cost, etc. – Forrest provided some additional info to the consultant. Final version of the Fleet report is received; Forrest to send out to HEAC for info by 10/13.</p> <p>1. Ford Hybrid Interceptor – wait until Feb</p> <p>2. CPIC – electric vehicle for future; wait until IRA incentives</p> <p>3. 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.</p> <p>4. School Bus – new 3 year contract; keep aware of programs available for future electric options.</p>
	2. Identify candidates for replacement in short term.	Initially replacing police vehicles with Hybrids. Consider conversions to Hybrid of light or medium-duty vehicles.	<p>Work with Tim Bragan and town staff to select vehicles.</p> <p>Plug in Hybrid retrofits available for medium duty trucks</p> <p>Peter requested Dept heads to identify vehicle replacement candidates. Initially Police and recently Fire Chief is interested in hybrid option.</p>

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4	Vehicles – Charging Stations	Lead: Brian	Support: Peter
	1. Create Charger Plan for Town use on Town property.	Feasibility reviews performed by ECI. Charger are only partially funded if not public use.	Focus on Public Safety Building. 1. Obtain quote for Fast charger from ECI for police cruisers. - Brian ask ECI 2. 2Determine if build-out (or any) will exceed electric supply?
	2. Create Charger Plan for public use on Town property	Feasibility reviews performed by ECI. DC Fast chargers are only partially funded.	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. HES #2 – more used by public. Concerned about the use by public. Concerned about time limits. 4. Bromfield Level 2 Charger in back priority.

5	Green Community Program – Meet Obligations and Maximize Grants	Lead: Brian	Support: Forrest/David
	Action	Status	Next Step
	2. Prepare application w/MRPC and submit to DOER by Oct 3 for 2022 Block 2 Competitive grant.	Working on list of projects.	Obtain quotes needed for projects. Decide if wait for 2023 Block 1. Max grant issue. – plan to submit <\$30k. – MRPC submitted the application on 10/6 in advance of the 10/7 deadline. Library Weatherization Phase 2 and Vehicle Police Hybrid were the only 2 items on the application.
	3. Update Energy Use Data and submit Annual Report by Nov 4.	Updating data.	FY22 energy use decreased – The new HES school uses ~20% less energy than the previous building. An adjustment is made in the annual report for the change in building stock square feet. Annual Report was submitted by 11/4 by MRPC.
	1. Specialized MA Stretch Building Code –Adopt in 2023.	No work yet.	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.

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	2. 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. - Brian create job description and justification (grants, etc.) and review with Kara/Ellen. Explain benefits>costs. Plan by Dec to prepare funding request for town meeting. – Description, Brian to review and plan to submit for Town budget; combine with a grant writer position. Draft Sustainability Job Description sent to HEAC for review. Concern that the Town has budget concerns.
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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	Two buildings identified - New COA (likely PPA) and Public Safety (likely direct purchase)	<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.</p> <p>Public Safety – Determine Lead group. – Charles Oliver is putting in a capital request for this direct purchase.</p> <ol style="list-style-type: none"> 1. PV System on Public Safety building pending IRA incentives. 2. David working on a conceptual strategy to be formalized. 3. 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. Will need a study to evaluate concerns. SusanMary will review with School Committee. 4. COA Building – HEAC position is to maximize solar installation. This conflicts with some on the PBC. Need a plan for excess.
	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.	Obtain PPA proposal from Solect. Also part of Revenue Ideation committee. No update from Solect. David reviewing with Kara to highlight this project on the Revenue committee.
	3. 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.
	Battery Storage - Add to HES PV system and evaluate others; evaluate funding source.	No work yet.	<ol style="list-style-type: none"> 1. Establish project scope and owner. – Brian obtain assistance to justify project <p>David identified the demand charges to be understood to justify the project (>\$15/kW). Bill issue with actual readings and net metering credits</p>

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			still being resolved with NGRID.
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.	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 rollout of new electricity supply program.	HEAC ready to support.	Ellen reviewed communication from Colonial. Meeting at COA on 10/6. Press Release in review. One year contract to be signed at 26/13 cents 6 months each. – CCA mailer sent out to all residents on the program. Session at the COA with Colonial Energy. Article in the Press.
	Net Metering Credit Purchase Agreements	Multiple offers (3) have been received due to the number of recent interconnection of dormant projects. Std Offer is 10%; 20 year contracts.	<ol style="list-style-type: none"> Existing Athol array \$75k at 20% discount. 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 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.
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	Installed in wrong location	NGRID to replace with lower watt fixture in original location. Escalated @ NGRID 8/30; 9/14 request submitted internally at NGRID to perform the work and is being escalated.

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			In NGRID queue to replace the test lamp. No update.
	Membership	No update.	
		Meeting adjourned 9:45 pm (voted 4-0).	
	Future Meetings	2022: Oct 12, Nov 9, Dec 14 HEAC Meeting Location/Time: 8 pm. – Virtual until further notice	

Other Items

1. WWTP leach field PV system. Tighe and Bond – David to ask Tim Bragan why it is a good application for solar PV.
2. Hampshire Energy – offered to have Harvard be an off taker for net metering credits to save 10% on electric bills. Determine impact of future PV installations. David working to evaluate our net metering credit appetite.
3. Climate event – Unitarian church climate meeting about the Inflation Reduction Act 10/19 at 6 pm.
4. **Climate Plan – Ellen send out latest version to HEAC.**