

Town of Harvard Energy Advisory Committee

BRIAN SMITH - CHAIR
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 BILL BLACKWELL
 JIM ELKIND
 DAVID FAY
 FORREST HODGKINS

ASSOCIATE MEMBERS: MATT COKE
 RENÉ ROY

LIAISONS: TIM CLARK, BOARD OF SELECTMEN
 PAT WENGER, SCHOOL COMMITTEE
 KEITH CHEVERALLS, CAPITAL PLANNING

Meeting Minutes 8/10/11

Attendees: B. Smith, E. Broadbent, B. Blackwell, J. Elkind, F. Hodgkins

Action / Topic	Meeting Discussion/Status
1. Approve the previous meeting minutes.	The minutes of 6/22/11 and 7/13/11 were approved.
2. Solarize Program	a. Jim Elkind is now leader of the Solarize program. b. Contracts need to be signed by end of September – 5 committed out of 68 feasible sites. Community garden concept being evaluated. Permit fees reduced. Need to communicate to town residents to ensure all households know about the program. c. Sunshot program – Harvard will apply to help develop guidelines for solar installations.
3. Energy Retrofit Projects	a. See Attachment (1) for a list of projects, status and next steps.
4. Other Items	a. Annual appointments Jim Elkind and Matt Coke were approved as HEAC members at the July 19 BOS meeting. b. Strategic Plan – Five year plan due to BOS in September. Brian to send out draft for review. c. Discussion about possible Bromfield student projects – Catalog energy tips, data entry for web site or energy data.

ENERGY COMMITTEE PROJECTS

8/10/11

Building	Project	Status Category	Status	Next Steps	HEAC Contact	Planned Complete
Funded and In Progress or Planned						
FY11						
Bromfield High School	Solar Panels - 5 kW system	In Process	Equipment procured. 5/11 - Final Drawings done. Drawing submitted to inspector for permit 5/16. 5/25 - School Committee approval not required for mounting change. 6/8 - Inspector signoff expected 6/13. 8/10 - Permit signoff complete.	2. Starting 8/17 - Titan Roofing perform roof work and Ostrow install structural roof supports and panels by 8/30. 3. Connect to electric grid. 4. Set up DAS and educational plan/curriculum. 5. Arrange PR.	Bill B	Jun-11
Bromfield High School	Mechanical Upgrades - DCV, BAS Upgrade, Retrocommissioning, RTU Fan VSDs	In Process	1. Equipment Installed. 2. 5/25 B2Q waiting for controls contractor to provide list of items that require repair.	1. B2Q to provide list of repairs to equipment discovered during the retrocommissioning. 2. Need final Ngrid signoff. 3. Electrical issues regarding electrical protection to be evaluated.	Brian S	May-11
Bromfield High School	Mechanical Upgrades - Options - Boiler HW VSDs, Pneumatic Controls Conversion	In Process	Equipment Installed	1. Need final Ngrid signoff.	Brian S	May-11
Hildreth Elementary	Boiler HW VSDs and Digital Controls	In Process	Equipment Installed	1. Need final Ngrid signoff.	Brian S	May-11
Town Hall	Energy Monitoring	In Process	4/27 - 5/25 - Dave Woodsum reviewed the monitoring equipment and electric panel. 5/25 - Completed circuits in Town Hall make this project more difficult than expected. 6/8 - David considers Hildreth House as best building to monitor circuits. Bromfield House would be a backup.	1. Select building and set up circuit monitors.	David F	May-11

FY12						
Hildreth Elementary School	Mechanical Upgrades - DCV, New BAS, Retrocommissioning	Funded (\$100k) Planned	1. Scope defined and updated in Jan 2011 by B2Q. 7/5/11 - Electric Incentives approved by Ngrid \$5850.	1. Need official confirmation of Ngrid Gas incentives via RISE Engineering.	Brian S	Q4 2011
Police Station	HVAC / EMS Upgrade	Partially Funded (\$22k); Planning	1. Determining the controls and boiler replacement changes with the largest impact and lowest cost. Investigation has included a site visit, Fitchburg Heating history review, Chief interview, B2Q site visit, EED audit. 2. Ngrid agreed verbally to a WBA evaluation.	1. Schedule walk through for B2Q to perform engineering audit. 2. Compile results of investigation. 3. Recommend mod to GC grant proposal based on B2Q proposal.	Brian S	Q4 2012
Fire Station	Replace Boiler	Funded (\$15k) Planning	1. Boiler quoted for budget estimate in Dec 2010 by Fitchburg Heating. 2. 6/22 Met with Fire Chief; distribution not controlled well. 3. 8/10 - Bids received.	1. Review with new Fire Chief. 2. Review bids received.	Forrest H	Q4 2011
Town Hall	Energy Study of Building Envelope	Funded (\$12.5k) Planning	Study to be integrated with design effort. 8/10 - Eric provided Building Committee with justification for Energy Modeling.	1. Contact Ngrid to see if work needs to be implemented first. 2. Contact Municipal Building Committee to justify investment for operational energy savings.	Eric B	Q4 2011
Bromfield High School	Gas Installation	Funded (\$30k) Planning	8/10/11 - No response from National Grid. \$8500 additional incentive expected.	1. Review project with Ngrid - rates, connection, meter. 2. Review project status with Mark Force - funded in FY12.	Forrest H	Q3 2011

FY13 and Future

Active						
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ENERGY COMMITTEE PROJECTS

8/10/11

Transfer Station PV Site	Solar PV Array 250 kW min PPA		4/14 reviewed Scituate experience with Scituate DPW Director Al Bangert. Discussed landfill history with Tim Bragan. Landfill covered in early 80's prior to EPA regulations - no formal cap.	1. Determine if Solar PV can be installed on uncapped landfill without capping. 2. Layout planning process. 3. Determine DEP permits required.	Brian S	Q3 2012
			7/13 - Federal Tax Credit incentives expire if construction does not begin at end of 2011. A MassDEP Landfill Post Closure Permit is required. The first step is to set up a Pre-Application meeting with DEP			
Not Active						
Town Hall & Fire Station	Insulation					Q4 2011
Town Hall	HVAC System Replacement/ Insulation		Assume 20% savings on baseline energy for heat			Q3 2013
Town Hall & Fire Station	Heating Controls - TH Heat Zones; FS Door Timer & Thermostats					Q3 2011
Public Library	Recommission EMS					Q1 2013
Public Library	Volunteer Hall Fan VSD, heating system outdoor reset control					
Hildreth Elementary School	Secondary Boiler(not burner)		Pursuit of MSBA and GC funds cancelled Mar 2011		Eric B	FY12
Hildreth Elementary School	K Wing Windows		Pursuit of MSBA and GC funds cancelled Mar 2011		Eric B	FY14
Bromfield High School	Secondary Boiler					
Fire Station	Remaining Projects from EED Audit					
Bromfield High School	Solar PV Array Roof PPA					
Bromfield High School	Solar Thermal for Kitchen					
Hildreth House	HVAC System Replacement/ Insulation					Q3 2013
Hildreth House	Energy Audit					
Old Library	HVAC System Replacement/ Insulation					Q3 2013
Town Highway Building	Remaining Projects from EED Audit					FY13
Bromfield House	Energy Audit					
Pond Pump	3 Phase Power?					
Town Buildings	Energy Monitoring System		Integrate with Schools BAS interface			