Town of Harvard Energy Advisory Committee

BRIAN SMITH - CHAIR
ERIC BROADBENT - VICE CHAIR
BILL BLACKWELL
IIM FLKIND

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 9/14/11

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

Action /	Meeting Discussion/Status					
Topic	moding Diodagololi otatao					
Meeting	August 10 and August 24, 2011 minutes were approved.					
minutes.	, , , , , , , , , , , , , , , , , , , ,					
Energy Retrofit	a. See Attachment (1) for a list of projects, status and next steps.					
Projects	b. Eric to investigate what Green Community reports are due.					
	c. A ribbon cutting / publicity event needs to be scheduled for the Big Belly and					
	Bromfield Solar installations. The Bromfield solar DAS will not be installed until					
	~ Dec. It was discussed that the Environmental Club help may be needed.					
Other Items	a. Strategic Plan – The five year plan was submitted to BOS on 9/8 and was					
	approved by all members present. This is a document that will be					
	continuously updated as needed.					
	b. Capital Plan – Pat provided the schools capital plan to discuss. The					
	Bromfield boiler is scheduled for FY14. HEAC to create a five year capital					
	plan incorporating energy items from individual departments/building plans.					
	Capital Plan requests (and assumed five year plan) are due to CPIC Oct 4.					
	c. Mass Insight Software authorization – Brian obtain approval and					
	submitted request for access to system by Jim Elkind and Matt Coke. d. Energy Manager/Town Facilities position – The draft set of all Energy					
	responsibilities for the Town and Schools was reviewed to determine what					
	responsibilities are needed for a Town Facilities resource to take on. Jim					
	Elkind will review the list and identify who is Responsible,					
	Accountable, Consulted, Informed for each item. The final list is to be					
	provided to the Town Facility committee for the 9/22 meeting.					
	e. A question from the BOS/MBC was discussed about whether there are any					
	incentives for LEED certification of municipal buildings. No members were					
	aware of any but will continue to research.					
	f. The role of HEAC in the master plan was discussed. The consensus was					
	that we have an energy plan and that can be included but we should leave					
	any master planning input requests to the BOS.					
	g. HEAC agreed to support the MRPC request for a meeting to share					
	experiences with Solarize and Green Communities.					

ENERGY COMMITTEE PROJECTS
9/14/11

Building	Project	Status Category	Status	Next Steps	HEAC Contact	Planned Complete
	rogress 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.	Starting 8/17 - Titan Roofing perform roof work and Ostrow install structural roof supports and panels by 8/30. Connect to electric grid. Set up DAS and educational plan/curriculum. Arrange PR.	Bill B	Sep-11
Bromfield High School	Mechanical Upgrades - DCV, BAS Upgrade, Retrocommissioning, RTU Fan VSDs	In Process	Equipment Installed. S/25 B2Q waiting for controls contractor to provide list of items that require repair.	B2Q to provide list of repairs to equipment discovered during the retrocommissioning. Need final Ngrid signoff. Electrical issues regarding electrical protection to be evaluated. B2Q to provide As-Built diagrams and explanation of proprietary code that was required to connect to existing equipment.	Brian S	Oct-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.	Select building and set up circuit monitors.	David F	Oct-11
EV42						
Hildreth Elementary School	Mechanical Upgrades - DCV, New BAS, Retrocommissioning	Funded (\$100k) Planned	Scope defined and updated in Jan 2011 by B2Q. 7/5/11 - Electric Incentives approved by Ngrid \$5850.	Need official confirmation of Ngrid Gas incentives via RISE Engineering. Evaluate reduced scope pending incentives received.	Brian S	Q4 2011
Police Station	HVAC / EMS Upgrade	Partially Funded (\$22k); Planning	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.	Schedule walk through for B2Q to perform engineering audit. Compile results of investigation by 9/3. Recommend mod to GC grant proposal based on B2Q proposal.	Brian S	Q4 2012
Fire Station	Replace Boiler	Funded (\$15k) Planning	***************************************	Review with new Fire Chief. Review bids received. Compare offerings.	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. 8/24 - MBC to pick OPM and will need help in Oct. for bid spec.	Contact Ngrid to see if work needs to be implemented first.	Eric B	Q4 2011

ENERGY COMMITTEE PROJECTS
9/14/11

Bromfield High School	Gas Installation	Funded (\$30k) Planning	8/10/11 - No response from National Grid. \$8500 additional incentive expected. 9/14 - Mark Force has quote for interior design work @ Bromfield.	Review project with Ngrid - rates, connection, meter. Review project status with Mark Force - funded in FY12.	Forrest H	Q3 2011
Town Buildings	Lighting upgrades in small buildings	Not Funded	8/24 - requested Prism to review Cemetery, Beach, Old Ambulance, Still River Fire and Hildreth House.	Arrange for Prism Consulting to review/audit buildings.	Bill B	Q4 2011
FY13 and Future						
Active						
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.	Determine if Solar PV can be installed on uncapped landfill without capping. Layout planning process. 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/Blower Door					
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			