

## Harvard Energy Advisory Committee

Meeting August 27, 2008 7:30 -9:30 PM

Hapgood Room, Old Library, Harvard, MA

### **Final Minutes and Action Items**

Attendees: Bill Blackwell, Eric Broadbent, Forrest Hodgkins, David Fay, Helen Kilian, Rene Roy, Brian Smith Jack Spero, Patty Wenger

Guest: Ben Urquhart, MA DCR Biomass Specialist

1. The minutes of 8/13/08 meeting were approved.
2. Town Energy Baseline - David currently obtaining oil and gas usage data.
3. National Grid Whole Building Assessment and Energy Efficiency Services –
  - a. **Action** – P. Wenger meet with T. Jefferson and L. Leonard to get MOU signed to get program started. B. Smith to ensure it gets to National Grid.
2. DPW Main Garage Roof – Replacement of tar and gravel with rubber and insulation - J. Spero met with DPW Rich Nota and determined that the plan is to spec out insulation of 5" equivalent to R30, thought to be reasonable. There is a thickness limit beyond which may require costly roof modifications.
  - a. **Action** – J. Spero to learn further details with DPW to ensure there is the most insulation for the money.
  - b. **Action** – E. Broadbent to investigate design study on the building by Mark Price.
3. School Committee 8/25/08 Meeting – Pat stated that the highlights of HEAC progress were present to the School Committee and they appreciate our efforts.
  - a. **Action** – B. Blackwell set up meeting with Mark Force to learn about his list of activities to reduce energy usage and establish better communication.
4. Green Roof – Bill explained the results of a study from Toronto stating that it is a possible solution in northern climates on existing buildings. He thought it is worth pursuing as there is a lot to learn about them. Benefits are energy efficiency improvement to 30% due to reduced cooling load, reduced heat island, reduced heat loss due to wind. Concerns are weight and cost of \$14-32/sqft.
5. Biomass – Ben Urquhart presented a brief summary of Biomass and the possible solutions in Harvard. Biomass is used in a small number of installations in MA. In VT 10% of the schools are heated with biomass using local forest management.

A feasible project in Harvard would be to install a system that could feed several buildings such as the schools and library. A rough estimate is that it would cost \$500k for 3 million BTUs 7 year payback saving 20k gallons of oil a year. A study would be required for ~\$20k and the system could be installed in 1-1/2 years. A backup oil system would still be required and there would be daily maintenance. The committee decided that we would not pursue this at this time due primarily the high capital cost, raw matl availability and price fluctuation, installation and maintenance of significant equipment and limited external funding support. Ben offered to help Harvard if we decide to pursue and type of biomass in the future.
6. Geothermal – Rene is setting up a visit to the Hastings school in Westborough on 9/16 at 1 PM to review their geothermal system.
  - a. **Action** – Rene to email directions and information when visit is finalized.
7. Focus and Priorities – The committee stated that we should focus on conservation activities including energy education and behavior modification.
  - a. **Action** – Identify an energy team at the high school including a teacher, students and staff. This will be started by H. Kilian as part of the environmental club and then we can pursue it through the Administration.

#### **Outstanding Actions**

1. **Action** - Obtain copies of 2 utility bills for each building and submit to DOER. – F.Hodgkins
2. **Action** – Talk to Lawrence Academy and find out their experience with geothermal. – E. Broadbent
3. **Action** – Arrange geothermal presentation for town hall or similar room. Consider notifying a newspaper to publicize it (Lynda King). – R, Roy

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Next Scheduled Meeting – September 10, 2008 7:30 PM Hapgood Room, Old Library