



Minutes of the Energy Task Force

January 11, 2012

1. **IN ATTENDANCE:** Geoff Cook, George Keithan, Sue Gumbart, Terry Doyle, John Byrne, Harsh Luthra, Deb Sodergren, Student members Peter Brandon, Erin Buckley, Sam Parker, Guest Tim Gannon **Absent:** Jonathan Norton, Bill Leahy
2. **CALL TO ORDER:** Geoff Cook called the meeting to order at 7:10 p.m.
3. **REVIEW AND APPROVE MEETING MINUTES FROM 12/21/11 KCETF MEETING:** Minutes reviewed and approved.
4. **NEW BUSINESS:**
 - a. **Jonathan Norton** - new member who was to be introduced, was not able to attend due work conflict.
 - b. **Vote on Chair and Vice Chair for 2012** - George K. nominated Geoff Cook to as returning Chair of the committee and Terry Doyle as Vice Chair. Deb S. seconded. All approved.
 - c. **Review "fast track" plan for assembling budgeting costs for facility upgrades using the SourceOne audit as a baseline** : Discussed plan with group. we will be working from to gather information and then turn into budget request to be put before the town's budget committee prior to early Feb meeting.
 - d. **Review the Building Audit Worksheet to ensure everyone's understanding of how to use it** - George reviewed spreadsheet
 - e. **Review individual team assignments** - Teams were organized into their groups. It was discussed what things to look for in conducting the audit and to follow the spreadsheet designed for each building and that were handed to each group leader. It was encouraged to take lots of photographs and if there were any areas of concern the team leader was to get in touch with George who would try to help.
TEAM A (Town Hall/Public Works): George Keithan - leader; Sue G; John Byrne; Sam Parker (student representative).

TEAM B (Library/Police): Geoff Cook - leader; Deb Sodergren, Peter Brandon (student representative). Absent: Jonathan Norton

TEAM C (Fire stations 1 & 2): Terry Doyle (new leader of group in Bill Leahy's absence) Harsh Luthra; Erin Buckley (student representative). Absent : Bill Leahy

f. Set dates / times for the individual teams to perform audits on the buildings assigned to them -

Team A: Meeting at 3:30 Friday ; **Team B:** Meeting at 3:30 Thursday; **Team C:** Meeting over weekend. All groups were aware that they needed to conduct audits and have photos and information ready to present and discuss at next week's meeting.

g. Collectively, the entire group performed the first audit at the Town Hall using the spreadsheet to input collected data - As a group we went through the entire Town Hall including basement, attic and looking at outside structure. Among the findings were that both doors leak air and should have sweeper seals. The mail slot at front entrance needs to be better secured. The old front door has a pane that needs to be replaced. Many of the windows need caulking. Neither the basement nor attic are adequately insulated. Many rooms are not equipped with occupancy sensors. Some lighting issues. Some issues with equipment that is not able to easily be powered off completely.

*The basement has additional issues beyond the scope of this committee, one of which is that Geoff noted that the heat manifold pipe is almost rotted through and should be addressed immediately.

5. OLD BUSINESS

a. No old business will be discussed

6. MEETING ADJOURNMENT

Respectfully Submitted,

Susan Gumbart

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Secretary – Killingworth Clean Energy Task Force

Library		Counts	Notes and Comments	Cost Per	Total Cost
1	Building Insulation: a. Note the wall insulation [if you can see it] for each floor. If you cant see it, say so. [Fiberglass batt, Spray Foam, Cellulous, None, etc.] b. Look in the basement <ol style="list-style-type: none"> i. Sill area and rim joist [Yes with "x", no] ii. Concrete Walls [Yes with "x", no] iii. Floor above [Yes with "x", no] c. Look in the first and second floor walls d. Look in the attic <ol style="list-style-type: none"> i. Soffit – are there baffles and insulation?[Yes with "x", no] ii. Attic floor [Yes with "x", no] iii. Air sealing of gaps in floor 		Fiberglass in some areas but cant see anything in the walls		
		1	No Sill or rim insulation	\$1,250.00	\$1,250.00
		1	None	\$0.00	\$0.00
		1	Some but not full filled	\$1,500.00	\$1,500.00
		0	Cant see any, would assume ok in newer section	\$0.00	\$0.00
		0		\$500.00	\$0.00
		0		\$2,500.00	\$0.00
		0		\$1,500.00	\$0.00
2	Air Sealing a. Are there foam gaskets on interior and exterior receptacles and switches [count all devices] b. Openings in walls for exhaust fans, vents, etc? Do they have dampers? c. Take pictures of any gaps.	50	No	\$3.00	\$150.00
		0		\$100.00	\$0.00
3	Weather-stripping upgrades and repairs - Look at every door and window a. Close the window and feel for air leaks [yes air leakage or no air leakage] total windows b. Look for weather-stripping around the door, between the sashes [yes or no]	12	Just in original building	\$40.00	\$480.00
		2	Poor	\$50.00	\$100.00
4	Window types a. Are the windows single or double pane [Count only single pane] b. For single pane windows, how many DON'T have storm windows c. How many windows DON'T operating correctly? Replacement suggested	12	Mixed old vs new section	\$0.00	\$0.00
		12		\$125.00	\$1,500.00
		0		\$750.00	\$0.00
5	Doors a. Are doors insulated and in good shape? b. Is there an insulated door in the basement to the outside? c. Do the doors latch tight?	0	Look ok	\$0.00	\$0.00
		1	None	\$600.00	\$600.00
		0	Yes	\$500.00	\$0.00
6	Upgrading Air-conditioning Systems a. For each building write down the Make and Model number of the A/C units. Take a photo of the name plate data from each exterior unit. Note the location of the units so we can confirm it later. Use a separate sheet of paper for more notes. b. If there is no central A/C, look for window units and write down make and model number	3	Three CU upgrades	\$7,000.00	\$21,000.00
		0		\$200.00	\$0.00
7	Upgrade the Heating System a. For each building write down the Make and Model number of the boiler or furnace. Take a photo of the name plate data from each piece of equipment. Note the location of the equipment so we can confirm it later. Also note the condition of equipment [very old, new, falling apart] b. Is the hot water piping or ductwork insulated?	0		\$0.00	\$0.00
		1	Piping is not insulated in basement	\$1,500.00	\$1,500.00
8	Install programmable thermostats a. Confirm the thermostat is programmable, need quantity of non-programable.	2	Most Programmable	\$250.00	\$500.00
9	Installation of Building Automation System a. This is limited to the library and may be over kill.	0	All local thermostats	\$0.00	\$0.00

10	Install outside temperature set back controller a. If there is a boiler look for controls. These would be digital on the boiler or furnace with an outdoor sensor. This may be hard to find since you are looking for something that may not be there.		1	Old boiler		\$1,500.00		\$1,500.00
11	Repair air damper controls on boiler a. Look for an exterior damper to bring in fresh air into the mechanical room.		1	No OA now		\$600.00		\$600.00
12	Replace electric heating coils in Library a. Look for small electric space heaters and get a count of them. This is only being used to sense how cold the space may be and to see if the systems are working correctly during the heating season.		1	Only for Library		\$15,000.00		\$15,000.00
13	Water Heater upgrades a. Is the water heater insulated with a 3" blanket. Double wrap it. b. Is the hot water piping insulated to at least 20 feet from the water heater?		1	No		\$250.00		\$250.00
			1	No		\$150.00		\$150.00
14	Water savings a. Are there low flow faucets in the restrooms [yes or no, how many] b. Are there low water closets 1.6gpm [yes or no, how many]		0	Yes		\$600.00		\$0.00
			0	Yes		\$750.00		\$0.00
15	Light fixture Occupancy Sensors a. Wherever there is a light switch, this can be changed to an occupancy sensor [count the total number of light switches]		15	Yes many		\$100.00		\$1,500.00
16	Lighting fixture upgrades a. Look for Incandescent light bulbs [need count] b. Look for T-12 fluorescent lamps [T means "tube", 12 means "12/8" diameter]		12	Basement and Attic		\$3.00		\$36.00
			0			\$150.00		\$0.00
17	Install Vending Machine Miser a. Count the number of vending machines		0	None		\$225.00		\$0.00
18	Day/Light Harvesting a. Limited application to Town Hall and Library		0	Can't see where it would be used		\$0.00		\$0.00
19	Energy Efficiency, parasitic loads and Energy Star a. Look at appliances and take model numbers. We want to see how old they are and if they are energy star b. What equipment is running all the time? Ask the occupants c. Are printers always on? Copier Machines? Computers? d. How about any "night lights"? e. How are exterior lights controlled? Do they run all night? Time clock, photo cell? f. Exit signs using CFL's?		1	Refrig is 12 years old		\$1,000.00		\$1,000.00
			0	Copier is left on all the time		\$0.00		\$0.00
			0			\$0.00		\$0.00
			0	None		\$0.00		\$0.00
			0	Time clock		\$0.00		\$0.00
			6	None		\$225.00		\$1,350.00
20	Miscellaneous a. If you see something that is not energy related but is not right, or broken, note it down.		0			\$0.00		\$0.00
Total Cost of work								\$49,966.00