

Warwick Buildings & Energy Committee

Annual Report for FY '08

The purpose of the Warwick Buildings and Energy Committee is to assess town buildings and maintenance needs, research options for the select board and Warwick citizens to encourage efficient energy consumption and optimal maintenance of town properties, and encourage Warwick townspeople's own efforts in renewable energy production and carbon footprint reduction.

The committee, established by the Selectboard on December 4, 2006, as an *ad hoc* Town Buildings Committee consisting of Dan Dibble and Marcel Varney, added energy issues to its concerns and became much more active under the prodding of Selectman Jim Toth after Steve and Janice Kurkoski joined the group in FY '07. As a result, the Selectboard voted on June 30, 2008, to make it an official town committee with six members appointed for staggered three-year terms, and to seek Special Town Meeting approval for this action.

Currently, the committee meets at 7 p.m. on the 3rd Wednesday of the month.

Members, as of the end of FY '08 are:

Janice Kurkoski '11 – chair

Steve Kurkoski '11– scribe

Jim Toth '10

Jack Cadwell'09

Dan Dibble'10

Les Goodman'09

Our accomplishments in the past year include:

Town Hall:

- Reduced heating oil use:

The committee installed a programmable thermostat donated by Steve & Janice Kurkoski in the town clerks' office. Heating oil consumption for the offices dropped from 2233 gallons in the 05/06 heating season, to 1587 gallons in the 07/08 heating season, or 29%. (the data for gallons delivered for the winter of 06/07 was combined with the dining hall, so it could not be used). Oil consumption for the main hall and dining rooms dropped even more dramatically, thanks mostly to David Young's watchful eye.

- Reduced town hall electricity consumption by 16%, or 33.5 kWhrs per month on average, over the same period (January – August) of the previous year.

The committee arranged for a lighting upgrade through National Grid, which involved the replacement of lights & ballasts in the dining hall & kitchen, offices, hallways, and outdoor entry areas. National Grid underwrote over 80% (\$994) of the total cost of \$1242, and the town paid \$211 (this includes an additional 15% discount for paying up front).

Committee member Dan Dibble also installed a smaller, more energy-efficient refrigerator donated by Town Coordinator David Young, allowing for use of the larger, very energy-wasteful one in the kitchen only at times when its large capacity is essential. This alone reduces town-hall electricity consumption by about 180 kwh per month for a savings to the town of about \$30 a month.

- **Computer monitor upgrade:**

The committee encouraged the installation of flat-screen monitors, which use roughly half the energy of CRT monitors.

- **Window repairs:**

Committee members made temporary repairs to some broken windows.

Jack Cadwell donated time and materials to rebuild one window in the Selectboard Office. This gave the committee a basis from which to estimate the cost of rebuilding all the town-hall windows (below)—a necessity for saving the town heating and cooling costs and increasing comfort levels in the building. The effect of insulation in the walls and roof would be enormously decreased by heat loss through the windows in their current condition.

The committee solicited estimates (below) for the cost of replacing the present storm windows with heavy-duty, energy-efficient ones.

Steve & Janice Kurkoski searched the attic and walls for insulation, finding none in the walls, except in the kitchen and dining room, and obtained two estimates for insulating the auditorium and office walls and increasing the depth of insulation in the attic to an adequate level (below).

- **Town Hall Repairs Needed:**

The committee generated the following Town Hall repair list and cost estimates, roughly in order of urgency:

Chimneys and foundation – repair, re-point, re-flash, install chimney caps, seal and vent the one unused chimney	\$3000
Roof - the tin on the roof is in bad shape, and there is some water leaking into the building, but there is no major structural	

damage reported at this time (the shingles are 22 years old). Strip roof, apply water and ice shield, install 50 year shingles <i>or</i> install 25 year shingles over existing roofing	\$37,000 (\$23,000)
Insulation --auditorium and office walls and additional in the attic (2 to 3 year payback if oil prices stabilize, sooner if they rise).	\$6,300
New heavy duty Storm Windows, installed-- (approximate 10-year payback, sooner if energy prices rise)	\$9,340
Exterior painting	
Scrape	\$2,600
Paint	\$10,660
Re-glaze and paint interior windows	\$5,500
TOTAL cost estimate	\$74,400

- Town Hall Fix-up Day

The committee set July 26, 2008, for volunteer work on the building:

- Basement drainage

With the assistance of Highway and Fire Department personnel and equipment, Jim Toth made an unsuccessful attempt to unblock the gravity drain from the cistern by the back door. A portion of the pipe, possibly under the Hotel Road pavement, seems to have collapsed. Repairs would be probably be prohibitively expensive.

Highway Dept:

- Reduced highway garage electricity consumption by 39%, or 171.5 kWhrs per month on average, for the same period (March – August) of the previous year.

The committee arranged for a lighting upgrade through National Grid, which involved the replacement of lighting fixtures in both buildings, and a few bulbs. National Grid underwrote over 80% (\$2,982) of the total cost of \$3728, and the town paid the remaining \$634, which includes an additional 15% discount for paying up front.

Warwick Community School Building:

- Reduced WCS electricity consumption by 2%, or 2,006 kWhrs per month on average, over the same period (January – August) of the previous year.

Computers settings were changed to go to standby after 20 minutes of idling. The 5th & 6th graders calculate that this is saving about \$180 a month.

The committee initiated a lighting upgrade for the gym. National Grid underwrote 80% (\$2,800) of the total cost of \$3,500 and the town paid the remaining \$700.

The committee met with Principal Ellen Edson and Custodian Tim Fairman to discuss heating system problems and further electrical use reductions.

Fire & Police Department Buildings:

The committee walked through to survey electricity consumption and insulation, and decided that while the buildings are not occupied enough to qualify for National Grid upgrades, many improvements could be made on our own here.

Other Committee Projects:

- Assembled books, DVDs, and a ‘Kill-a-Watt’ meter to make up an “energy kit” for the library, which townspeople can check out
- Consulted with George Day on the location of the underground culverts & water pipes in the town center and made a list of parties responsible for winterizing them.
- Toured fire station, police trailer, old school and town hall with Fire Chief Gunnar Lambert and his trusty infrared imager to better pinpoint problem heat-loss areas.
- Obtained and inventoried past oil use data from Rice Oil and Country Oil and electric data from National Grid using the EPA’s Energy Star Portfolio Manager to track energy use.
- Recommended that selectboard sign an EPA 10% Challenge letter committing themselves to reduce energy consumption in town buildings by 10%.
- Applied to the Division of Energy Resources for free energy audits of town buildings.
- Applied for participation in FRCOGs bid to engage Energy Service Companies.
- Monthly “green” idea promotion on roadside signs.

- “Change-a-Light” campaign with WCS 5th & 6th graders, distributing over 80 cfl bulbs donated by National Grid to townspeople.
- Promoted “Clean Energy Choice” through which residents can buy electricity from non-polluting sources. As a result, Warwick has now attained 6.48% of households participation, entitling us to a \$400 bonus to our Renewable Energy Fund, for a total of \$4350 as of June 30, 2008. **We now have the 5th highest participation rate in the entire state, surpassed only by Wendell, Shutesbury, Monterey, and Alford. Warwick rocks!**