

Town of Center Harbor Energy Committee 36 Main Street, Center Harbor, NH 03226

2023 Activities

During the 2023 year of service to the residents of Center Harbor, the Energy Committee concentrated on one major project for the town: a ground-based solar array to further reduce town electricity costs for the Municipal Building. First steps on this project began in 2022 when the Energy Committee consulted with a solar professional, analyzed the building's electrical needs, explored the type and location of the array and prepared an initial proposal for the Select Board.

During 2023, the Committee continued work on this project:

- With input from the Select Board, decided on the array location, created a schedule for the project and a Request for Proposal (RFP).
- Consulted with NHEC on technical aspects of the project.
- Hired a surveyor to delineate the potential site for the array.
- Made an informal presentation of the project to town residents at the end of the March 15, 2023
 Annual Town Meeting, including providing a handout and adding information to the committee's website.
- Published an RFP and contacted potential contractors.
- Met with five solar contractors who attended mandatory meeting to answer questions and tour the
 potential site for the array.
- Reviewed proposals sent by two solar contractors; visited sites of previous arrays built by these contractors; chose Barrington Power as the solar contractor which whom we wished to work.
- Explored Federal and State grants and rebates potentially available for this project.
- Collaborated with PAREI (Plymouth Area Renewable Energy Association) and four other central New Hampshire towns in initial efforts to apply for a Federal Grant for the solar project.
- Conducted two Public Hearings (one in November and one in December) to discuss the solar array project with Center Harbor residents; presented a slide show and answered questions from the public.

In addition, in 2023, the Energy Committee:

- Continued volunteer participation in a Center Harbor Solar Shares project initiated by PAREI (Plymouth Area Regional Energy Initiative) and Lakes Region Conservation Trust (LRCT). The project was completed in 2023 and will provide solar energy credits for approximately 10 needy families from Center Harbor, Holderness, Sandwich and potentially Meredith.
- Continued municipal membership in Clean Energy NH a resource for education on new state and federal energy legislation, technical assistance on energy projects, advice on energy efficiency incentives and financing.
- Networked with other towns on energy savings and efficiency programs.

During 2024, the Energy Committee will:

- Present the Solar Array project at a final Public Hearing and at the 2024 Annual Town meeting in March,
 where the Town will hopefully vote to approve the project
- If the project is approved, work with selectmen, contractor, and interested residents to complete this project. Hopefully having it online before the end of 2024.
- Pursue funding for the solar array through Federal and State resources.
- Continue to focus on other energy savings opportunities for the town and its residents.
- Join PAREI as a municipal member and partner with their efforts to expand renewable energy in New Hampshire.
- Renew the town's municipal membership with Clean Energy NH; attend their educational events.
- Participate in the New Hampshire Environment Energy and Climate Network Energy Working Group
- Continue to gather and analyze town electric, propane and oil usage.
- Continue to network with other towns and groups regarding energy issues.

2022 Activities

During the 2022 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective, energy-savings opportunities, including:

- Looked into lighting upgrades to LED in the Municipal Building and Fire Department. The only remaining non-LED lighting is in the Fire Department bathrooms which are to be renovated soon and lighting will be upgraded then.
- Initiated discussions with the Fire Chief into two-stage lighting for the Fire Department doors and along the parking areas; awaiting cost estimates to determine the funding mechanism.
- Discussed options for improving Heating/Cooling System reliability in the Municipal Building and Fire Department. Will re-evaluate the issue next Spring after a recently installed barrier has been tested under winter conditions. The Fire Chief is looking into mini splits in specific interior areas there.
- Continued tracking the Town utility usage data in a database for analysis and comparison; historic trends from 2015 2021 show that the Town is generally reducing energy usage.

- Initiated discussions for a solar project to further reduce town electricity costs. Consulted with a solar professional. Presented a proposal to the Select Board for a ground-mounted system to generate approximately 130 MW/yr. Town usage is just over 100 MW/yr. Any excess would be sold back to NHEC. New Federal legislation may allow the town to get a rebate up to 30%. This project will be presented as a proposal and not a warrant article for 2023.
- Participated in a Solar Shares project PAREI (Plymouth Area Regional Energy Initiative) is working on
 with Lakes Region Conservation Trust (LRCT). The project at the LRCT site in Center Harbor will provide
 solar energy credits for approximately 10 needy families from Center Harbor, Holderness, Sandwich and
 potentially Meredith. Energy Committee involvement in this project will continue through 2023 until
 completion.
- Continued municipal membership in Clean Energy NH a resource for clean energy and clean tech issues, education on new state and federal energy legislation, technical assistance on energy projects, advice on energy efficiency incentives and financing.
- Networked with other towns on energy savings and efficiency programs.

During 2023, the Energy Committee will:

- Continue to focus on energy savings opportunities for the town and its residents such as a PV system for the Municipal Building.
- Continue to gather and analyze town electric, propane and oil usage.
- Renew the town's municipal membership with Clean Energy NH.
- Continue to network with other towns and groups regarding energy issues.

2021 Activities

During the 2021 year of service to the residents of Center Harbor, the Energy Committee continued to be mostly idle given the ongoing situation with Covid-19.

2020 Activities

During the 2020 year of service to the residents of Center Harbor, the Energy Committee was mostly idle given the situation with Covid-19. However, the committee was able to complete one significant project, mostly through the efforts of its chair, Carol Sullivan. That project was to replace the lighting in the Municipal Building, Fire Department, and Police Station with energy-efficient LED lighting through a program of the New Hampshire Electric Coop (NHEC), which covered 75% of the costs.

We thank Carol Sullivan, NHEC, and the contractor, Ecolectric LLC (Plymouth, NH), for making this project possible under difficult conditions (because of Covid-19 and given the late start and short time constraints). And, thanks to the Town employees that reviewed lighting options and provided access to the required areas.

Going forward, this should reduce the lighting costs for the Town. The Energy Committee does track the Town's electricity (and fossil fuel) usage and will provide an update in the future on electricity usage savings. As the installation occurred in late December, no usage history is yet available.

For 2021, the committee will continue its ongoing activities, though at a reduced frequency given the current Covid-19 situation:

- Encourage energy efficient applications for Town projects, including the historic Town House.
- Continue gathering and analyzing Town electric, propane and oil usage.
- Explore renewing the town's municipal membership with Clean Energy NH.
- Continue to network with and monitor other towns and groups regarding energy issues.

At the time of writing, the committee had not yet recommended an appropriation to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

2019 Activities

During the 2019 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The Committee completed the following projects and activities in 2019.

- Replaced the fluorescent lighting in the Center Harbor Town Garage with energy-efficient LED lighting. Center Harbor received a rebate of \$2,472 from NHEC for this project.
- Continued collecting several years of Town utility usage data into a database for analysis and comparison.
- With approval by the Select Board, initiated a municipal membership for Town in Clean Energy NH a membership-based non-profit organization that is a resource for clean energy and clean tech
 issues. Benefits include education on new energy legislation such as SB286 now a NH law, access to
 technical assistance on energy projects, access to energy efficiency incentives and financing and free
 attendance at educational events.
- Networked about recycling with other towns, the Lakes Region Planning Commission (LRPC), the Northeast Resource Recovery Association (NRRA). Participated with the Meredith Energy Committee and a representative of the LRPC in a tour of the Meredith Transfer Station.
- Monitored and networked with other towns and organizations on energy savings and efficiency programs including:
 - Plymouth Area Renewable Energy Initiative (PAREI) and its Solar Shares projects to benefit lowincome families;
 - NH Saves and Lakes Region Community College (LRCC) energy efficiency workshops; posted relevant workshops in Town website;
 - Towns of Meredith, Plymouth and Tamworth topics of mutual interest include recycling,
 Community Power and solar.

For 2020, the Committee will continue the activities started in 2019, including:

Encourage energy efficient applications for Town projects, including the historic Town House.

- Continue gathering and analyzing Town electric, propane and oil usage.
- Explore renewing the town's municipal membership with Clean Energy NH.
- Continue to network with other towns and groups regarding energy issues.

The Energy Committee requests a 2020 appropriation of \$10,000 (same as 2019) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

The committee is looking for additional members (you do not need to be an energy expert or professional)! Our current membership has diverse work backgrounds in fields such as facility planning, mechanical and software engineering, architecture and manufacturing (as well as retirement). Please attend a committee meeting if interested.

2018 Activities

During the 2018 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The Committee completed the following projects and activities in 2018.

- Insulated the foundation walls for the heated portion of the Center Harbor Town Garage; replaced the two entry doors with insulated doors; and improved the weather stripping for the overhead garage doors. The Committee obtained \$5037.94 in rebates from NHEC (35% of project cost) as part of this project. Pending approval at the March 2019 Town Meeting, the Committee requests that \$494.72 of the rebate be credited to the Building Repairs & Maintenance ETF, and \$4543.22 be credited to the Energy Conservation & Improvements ETF.
- The Committee investigated a potential Town Garage structural analysis that would be required prior to improving the wall and ceiling insulation. Additional insulation and sealing would require ventilation to maintain appropriate air quality. The Committee's preliminary investigation indicates that this project is likely not cost effective at this time.
- The Committee investigated opportunities to replace Town Garage fluorescent lighting with LED lighting. An RFP was issued, but responses were limited and higher than NHEC rebates would justify.
- Updated and issued a recommended energy savings handout for new construction and renovations.
- Hosted a NHSaves Button Up workshop to educate the public about opportunities to save energy, including utility rebates, low-cost high return energy solutions, and opportunities for matching funds.
- Collected several years of Town utility date and entered into a database for future analysis and usage.
- Participated in regional energy committee meetings to expand the committee knowledge of opportunities, and raise community awareness. Reviewed the Town Planning Board Master Plan Action items for updates as needed.

For 2019, the Committee will continue the activities started in 2018, including:

- Further evaluate energy conservation opportunities for the Town Highway Garage as a second phase.
- Encourage energy efficient applications for Town projects, including the historic Town House.

• Collaborate with Meredith and Plymouth Area Regional Energy Initiative (PAREI) Energy Committees as appropriate to identify opportunities to save energy. Work with the Lakes Region Planning Commission (LRPC) as appropriate for future energy opportunities.

The Energy Committee requests a 2019 appropriation of \$10,000 (same as 2018, however see above as to why appropriation request is higher) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

2017 Activities

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During the 2017 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The Committee completed the following projects and activities in 2017.

- In collaboration with the Center Harbor Trustees, installed stack lighting and dome illumination in the Center Harbor Library. This project was funded 60% by the Energy Conservation and Improvements Expendable Trust Fund, and 40% by the James Nichols Library Trust. The project includes high efficiency LED light fixtures specifically designed to improve lighting quality in the stack area, while respecting the historic aesthetic of the facility.
- Developed a plan and specifications to insulate the foundation walls for the heated portion of the
 Center Harbor Town Garage; replace the two entry doors with insulated doors; and improve the
 weather stripping for the overhead garage doors. The Committee's recommended solution and bid
 solicitation process was approved by the Selectmen late in 2017. The NHEC has conditionally approved
 the project for their rebate program, up to 35%. The project will be completed in early 2018.
- The Committee also investigated improving the wall and ceiling insulation; however, there needs to be
 further evaluation as to whether the structure can support snow loading if heat losses through the roof
 are significantly reduced. Additional insulation and sealing would require ventilation to maintain
 appropriate air quality.
- Welcomed new committee member Carol Sullivan. Carol brings her facility planning, technical writing and research expertise, as well as a specific interest in exploring potential PV/solar applications for Town benefits.
- Participated in regional energy committee meetings and Button Up Workshops to expand the committee knowledge of opportunities, and raise community awareness.

For 2018, the Committee will continue the activities started in 2017, including:

- Further evaluate energy conservation opportunities for the Town Highway Garage as a second phase.
- Encourage energy efficient applications for Town projects, including the historic Town House.
- Update and issue the recommended energy saving opportunities handout for new construction and renovations.

• Collaborate with Meredith and Plymouth Area Regional Energy Initiative (PAREI) Energy Committees as appropriate to identify opportunities to save energy. Work with the Lakes Region Planning Commission (LRPC) as appropriate for future energy opportunities.

The Energy Committee requests a 2018 appropriation of \$10,000 (same as 2017) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

2016 Activities

During the 2016 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The Committee completed the following projects:

- Installed insulation and vent covers for the Center Harbor fire station to save energy. The Committee obtained \$1706 in rebates from NHEC as part of this project.
- Completed a Street Lighting Guideline for use by the Selectmen as guidance for both the installation and removal of street lighting as appropriate.
- Developed and updated a web page for the new Town Website.
- Developed a plan and specifications with the Center Harbor Library Trustees to abandon outdated knob and tube lighting, and install energy efficient and improved lighting quality for the stacks in the Library.
 The Committee's recommended solution and bid solicitation process was approved by both the Library Trustees and the Selectmen late in 2016.

For 2017, the Committee will continue the activities started in 2016, including:

- Purchase and install stack lighting and dome illumination in the Center Harbor Library.
- Begin evaluation of energy conservation opportunities for the Town Highway Garage.
- Encourage energy efficient applications for Town projects, including the historic Town House.
- Collaborate with Meredith and Plymouth Area Regional Energy Initiative (PAREI) Energy Committees as appropriate to identify opportunities to save energy.

The Energy Committee requests a 2017 appropriation of \$10,000 (\$9,999 greater than 2016) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

2015 Activities

During the 2015 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The prime focus for this year was on installing updated energy efficient lighting for the Gazebo and beach area, finalizing recommendations for street lighting to the Selectmen, and developing specifications for the Center Harbor fire station to save energy. The Committee started working with the Center Harbor Library Trustees to develop a plan to upgrade the outdated wiring and install energy efficient and improved lighting in the Library.

The Committee analyzed the existing street lighting and billing. The NH Energy Co-op (NHEC) is replacing existing lighting as they fail over time with LED street lights. Although these are lower cost lights to operate, they have a higher first cost, and the NHEC tariffs will reflect a higher monthly unit cost to recover the installations. If no optimization is done, the annual costs will increase by 50% over time. The Committee identified billing errors and made recommendations to the Selectmen to optimize lighting in the Town. The Selectmen evaluated the recommendations and solicited input at a Public hearing in September 2015. Based on input from the Public hearing, the Selectmen have finalized a plan, with an anticipated 2016 lighting cost savings of 6%.

Based on the experience of other New England towns, and input from the Public hearing, the Committee is developing a Guideline for the Selectmen to assist in evaluating criteria for either additions or removals of streetlights going forward. The criteria are based on considerations as related to security, pedestrian safety, traffic safety, convenience, and to support economic development and esthetics.

For 2016, the Committee will continue the activities started in 2015, including:

- Award the construction and installation of custom insulated vent covers for the Fire Station exhaust fans to conserve heat during winter operation.
- Evaluation and award of an insulation project to conserve heat in the Fire Station.
- Complete a study and make recommendations to the Selectmen and Library Trustees to improve the energy efficiency and quality of lighting in the Library.
- Complete a Street Lighting Guideline for use by the Selectmen as appropriate.
- Encourage energy efficient applications for Town projects, including the historic Town Hall.
- Collaborate with Meredith and other regional Energy Committees as appropriate to identify opportunities to save energy.

The Energy Committee requests a 2016 appropriation of \$1 (\$9,999 less than 2015) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities. The existing ETF should be adequate to support currently identified projects.

2014 Activities

During the 2014 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. The prime focus for this year was on completing the Street Lighting survey, turning the survey results into recommendations to the Selectmen, and assisting the Town of Meredith with the Regional Energy Fair held October 18th.

The Street Lighting review and evaluation was conducted by developing an evaluation form which was used to review each street light and determine whether each light was serving a useful public service, primarily in the interest of public safety. The general guidelines for the evaluation were:

- Location is it at an intersection or a crosswalk or in a high traffic area?
- Need is it needed for public safety or as a marker?

- Application is it servicing the general public or a specific residency or business?
- Quality is the brightness and area coverage appropriate?
- Impact are there detrimental effects such as glare or light trespass?

Based on the evaluation, the committee has provided the selectmen with a recommendation as to lights to be eliminated, and that the remaining lights should be upgraded to LED fixtures. Exact cost savings will depend on the final list of lights to be decommissioned and the added fixtures costs for LED fixtures – but the town could save several thousands of dollars per year.

Also, the Energy Committee:

- Assisted with the Town of Meredith's planning and staging of the Regional Energy Fair held at the Inter-Lakes High School on Saturday, October 18th. This fair was a success with many vendors and interesting talks/discussions and was attended by many in the area.
- Is working on proposing an upgrade to the lighting for the band stand.
- And, will continue to investigate options for improving the insulation of the Fire Station.

The Energy Committee requests a 2015 appropriation of \$10,000 (same as for 2014) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of the Town's facilities.

2013 Activities

During the 2013 year of service to the residents of Center Harbor, the Energy Committee continued to focus efforts on various cost-effective energy-savings opportunities. In addition to exceeding both minimum and preferred goals for improved energy efficiency of the Municipal Building addition, the committee developed specifications and projected savings for insulating the Fire Station, and initiated a survey of all town outdoor lighting to determine need as well as effectiveness. These and other 2013 accomplishments are reported below:

- Municipal Building Renovations and Addition:
 - Worked with the Selectmen to optimize energy efficiency while evaluating reduced-cost alternatives.
 - Confirmed success of all actions taken to improve energy efficiency. GDS Associates, Inc. of
 Manchester, NH conducted and submitted a final site inspection report on October 1, 2013 that
 concluded: "The final energy savings are a 64% energy reduction on an overall MMBtu basis
 when compared to code, which includes all end-uses including heating, hot water, air
 conditioning, lighting, and plug loads."

The project significantly exceeded the original requirements: "the addition and renovated portion of the Municipal Building be at least 25% more energy efficient than required by the New Hampshire Commercial 2009 International Energy Conservation Code." And, even exceeded the stretch target of at least 50% more energy efficient!

This is projected to save the Town approximately \$8,000 per year in energy costs.

- Assisted the Town in obtaining \$27,800 in incentives from the NHEC Energy Solutions Program (see the NHEC November 2013 newsletter).
- Fire Station Issued an RFP for improving the insulation of the Town's Fire Station, evaluated the one response received, and worked with the Selectmen on obtaining the funds necessary to proceed with this project in 2014 or 2015.
- Street Lighting Continued work on developing criteria for evaluating all functional aspects of the Town's outdoor street lighting in an effort to both improve safety and minimize operating cost (paid by tax dollars).

The Energy Committee requests a 2014 appropriation of \$20,000 (flat funding) to the existing Energy Conservation & Improvements Expendable Trust Fund to improve the energy efficiency of those portions of the existing Municipal Building not addressed by the addition and renovations project, to continue other ongoing projects as noted above, and initiate new projects.

2012 Activities

During its fifth year of service to the residents of Center Harbor, the Energy Committee focused considerable efforts on cost-effective energy-savings opportunities in the design and engineering of the Town's Municipal Building addition, as well as renovations to the existing structure. These and other 2012 accomplishments are reported below:

- Municipal Building Renovations and Addition
 - Worked with the Selectmen and the Building Advisory Committee to require that both the
 addition and renovated portion of the Municipal Building be at least 25% more energy efficient
 than required by the New Hampshire Commercial 2009 International Energy Conservation Code.
 The July final design slightly exceeded this requirement at 26% more energy efficient than code.
 The value engineering and final building design remain to be re-evaluated.
 - Wrote an RFP to hire a firm to perform an energy audit and provide analysis and recommendations to increase the energy efficiencies to a level of 50% over code. After evaluating the proposals submitted to perform the work specified, the committee recommended that the Selectman hire GDS Associates of Manchester, NH.
 - Reviewed the GDS Energy Analysis and Improvements Report and provided prioritized recommendations to the Selectmen based on cost-effectiveness, rebates available, quick payback, and other factors.

Street Lighting

- Initiated a review of the Town's street lights to assure that the Town is paying only for appropriate lighting and to investigate the potential of switching to more efficient lighting (such as LED).
- Submitted a first-draft lighting ordinance proposal to the Building Committee for consideration.

• Useful Information - Distributed ongoing information via email and website regarding energy-efficiency methods, products, and savings, as well as notices of regional energy fairs and workshops.

The Energy Committee is requesting that the 2013 Town Meeting appropriate \$20,000 (flat funding) for the existing Energy Conservation & Improvements Expendable Trust Fund. In 2013, the committee plans to improve the energy efficiency of those portions of the existing Municipal Building not addressed by the addition and renovations project.

2011 Activities

Now in its fourth full year of service to the town, the Center Harbor Energy Committee is pleased to report the following accomplishments in 2011:

- Completed all Energy Committee actions necessary to replace the Fire Station's aging garage doors with architecturally compatible units that significantly improve energy efficiency and file the application for a NHEC rebate.
- Initiated and discussed various projects to improve energy efficiency of the Municipal Building and improve lighting quality and efficiency in the Cary Mead Room. These projects are currently on hold pending the outcome of proposed renovations and additions to the Municipal Building.
 The Energy Committee will assist the Selectmen and Building Advisory Committee to assure that the renovations and additions are prudently energy efficient.
- Provided an Energy Chapter for the Town's Master Plan that was accomplished with the assistance of Eric Senecal of the Lakes Region Planning Commission and Planning Board.
- Completed an Energy Considerations handout available at the Town Offices that provides various informative considerations and resources for those considering new construction projects or renovations.
- Concluded that a Fuel Cooperative specifically for Town residents did not make sense.
- Distributed information regarding various energy fairs/workshops to those on the Energy Committee's email list and on this website.

The Energy Committee has requested that Town Meeting approve \$20,000 (flat funding) for the Trust Fund in 2012.

2010 Activities

Now in its third full year of service to the town, the Center Harbor Energy Committee is pleased to report the completion of several energy-saving improvements for the town as well as the initiation of new activities focused on additional and ongoing energy savings (as outlined in the Jordan Institute Report, see 2009 Activities). Last year, the Town approved creation of a \$20,000 trust fund for energy conservation activities. That funding, plus the time and expertise contributed by many, made these projects possible. This year your Energy Committee requests that the town fund a like amount.

Accomplishments in 2010 include:

- Upgraded lighting in the Town Municipal Building and Garage An upgrade to modern and more energy efficient lighting addressed both efficiency issues and greatly improved lighting. Jeff Haines has reported that, "At five times the amount of light we used to have in the Town Garage, the upgrade has greatly improved our work environment and created safer conditions." Almost half the total project cost of \$11,000 was paid by the New Hampshire Electric Cooperative's Small Business Energy Efficiency Program. The remaining amount was contributed by the energy trust fund. Payback at current market rates (estimated at \$2,100 annual savings) is three years.
- Specify energy-efficient replacement boiler for the Municipal Building Advised Selectmen on replacement of a leaking boiler with a more energy efficient unit. The increased cost was insignificant, and the total installed cost was covered from the Town maintenance fund.
- Specify replacement garage doors for the Town Fire Station Worked with the Selectman and Fire Chief on replacing the aging garage doors with new and more energy-efficient doors that retain the desirable character of the building design. The Energy Committee agreed to contribute approximately \$3,250 of the total \$6,500 cost of two of the four doors and the New Hampshire Electric Cooperative will fund the other \$3,250. (The Town will completely cover the cost of replacing the other two doors.) This project is scheduled for completion early in 2011.
- Applied for grants from the NH Office of Energy and Planning Based on the Jordan Institute report findings, the committee prepared grant proposals for Energy Efficiency and Conservation Block Grants, but did not receive funding.
- Advised on window sealing and insulation for Library Met with Library Trustees to discuss energy
 efficiency measures for sealing air leaks in the Library's windows without altering the character of the
 building's architecture.
- Researched establishing a Fuel Coop for Town residents Conducted preliminary inquiries to determine conditions of membership and potential savings on fuel oil and propane. Conducted a survey of interest among residents subscribed to the Energy Committee's e-mail list.
- Distributed information regarding various energy fairs/workshops.
- Worked with LRPC and Planning Board on an Energy Chapter for the Town Master Plan.
- Maintained this website to distributed energy-related information to Town residents.

The Center Harbor Energy Committee has committed approximately \$9,400 from the Energy Trust Fund in 2010 and has requested that Town Meeting approve \$20,000 (flat funding) for the Trust Fund in 2011.

2009 Activities

In its second full year of service to the town, the Center Harbor Energy Committee has completed a Comprehensive Level II Energy Analysis of three town-owned buildings and is now seeking town approval to initiate implementation of the recommended energy-efficiency measures in 2010.

In early 2009, the Jordan Institute conducted a no-cost energy audit of town buildings that identified how several could benefit from energy-efficiency measures. The committee then arranged for the Jordan Institute

to perform a Comprehensive Level II Energy Analysis of the Municipal Building, Town Garage, and Town Library. Their <u>report</u> was delivered in late 2009 and confirmed that the Municipal Building and Town Garage have fairly poor energy efficiency when compared to similar structures.

The report further identified several no-cost to low-cost energy-saving initiatives, as well as twelve efficiency measures with varying costs and payback periods. The Energy Analysis findings and recommendations are currently being studied by the committee and others so as to provide guidance to the selectmen and the town. It is expected that the completion of these initiatives will likely span several years depending on Town funding and as grants can be obtained to help fund specific projects.

Other accomplishments in 2009:

- Developed and distributed an informative handout at Town Meeting and also posted the energy-saving tips on this website.
- Supported the Dark Sky Initiative that Governor Lynch signed on July 15, 2009.
- Obtained an inventory of town streetlights to consider alternatives for potential energy savings and determined there were no practical solutions considering the relatively few lights involved.
- Provided input on energy efficiency to the Building Committee regarding design of the new Police Station.
- Drafted a handout to be included with building permits that provides energy-efficiency recommendations for new construction and renovations.
- Maintained this website.

2008 Activities

In its first full year of operations, the Center Harbor Energy Committee intensified its focus on:

- Exploring energy-saving measures that could be immediately effective
- Developing a longer-term strategy for the Town
- Working with other energy committees, non-profit organizations, and the State to share information and take advantages of economies of scale inherent in joint operations.

In the short term, our goal has been to build public awareness of savings opportunities and look for 'quick fix' opportunities for residential and town buildings. These efforts have included:

- Mounting The Great Light Bulb Giveaway and Cake raffle on November 4th, 2008, with our thanks to NH Electric Co-op, Heath's Supermarket, Cakes by the Lake, and Christopher P. Williams, Architects.
- Bringing the Jordan Institute and NHEC specialists to audit all Town buildings for possible 'easy' savings
 opportunities and identifying longer term inefficiencies. Immediate benefits have included installing a
 new, well-insulated door on the north side of the Firehouse and turning off the main boiler in the
 summer.

- Getting our website up and running to provide timely energy savings tips and information on local energy fairs, workshops, etc.
- Publishing public service announcements to promote, for example, the light bulb giveaway program.

The Committee is also working with other town organizations, like the Planning Board, to identify projects that, in time, could well save the Town money – as well as improve quality of life. For example:

- Conducting an inventory of all Town lighting with the aim of eliminating unnecessary outdoor lights and replacing current, wasteful fixtures with those that are more energy-efficient
- Supporting the 'Dark Sky Initiative' see An Act Relative to Outdoor Lighting Efficiency, 2009 House Bill 585-FN.

And, finally, the Committee, working with the Lakes Region Planning Commission, helped initiate the Lakes Region Energy Alliance, which has now met three times. This Alliance will be looking for larger scale savings opportunities and is already sponsoring seminars and workshops.

2007 Activities

On September 12, 2007, Bart Coudert (CHEC) met with Mr. Bill Smith, a representative from the NH Electric Coop, in an effort to determine ways to save energy in the town office. The most obvious conclusion was that the lighting needed to be upgraded. Currently in the town office and in the fire station, either old style incandescent bulbs on dimmer switches or T-12 florescent bulbs are being used. These energy hogs should be replaced with the more efficient and longer lasting HPT8's, a new type of florescent which is a ballast and bulb unit. The cupola lighting and lighting in the entryway are also in question. Mr. Smith suggested that we start with the most used rooms and replace those bulbs first.

In the fire station, Mr. Smith noted that the oil-fired heating system (oil) was rated at 81% efficient. A more modern system is 95% efficient. The Pepsi machine on the exterior of the fire station was estimated to use up to 400 kWh per month (\$60). The committee suggests that future upgrading to the town office or fire station should be done with energy conservation in mind.