Energy Technical Assistance for New Hampshire Communities:

Final Report

September 5, 2012

Prepared by

CLF Ventures, Inc.

for

New Hampshire Office of Energy and Planning
Introduction
As part of the federal funding from the American Recovery and Reinvestment Act (ARRA) received through the Energy Efficiency Community Block Grant (EECBG) program, the New Hampshire Office of Energy and Planning (OEP) issued an RFP to provide technical assistance to New Hampshire municipalities to improve the energy efficiency (EE) of their public buildings and facilities. In April 2010, OEP contracted with a team led by CLF Ventures, Inc. (CLFV) to provide this technical assistance through the Energy Technical Assistance & Planning for New Hampshire Communities program (ETAP). Work was completed in August 2012.

The goal of ETAP was to offer technical assistance to all New Hampshire cities, towns, and counties to improve the EE of their municipal and county buildings. The program was designed to assist communities in identifying potential EE improvement projects through energy inventories and building assessments, and to provide specific assistance to move projects to initiation and completion. The grant for this work was $2 million. While the program did not provide funding to implement municipal EE projects, such funding was provided through a separate EECBG program administered by OEP to municipalities.

This report provides a summary of the work of ETAP and a review of the program’s successes and challenges, as well as guidance on how to better provide future EE technical assistance services if funding were to become available in the future.

Program Design and Methods
This section outlines the project team and the project design, including an overview of the services offered under the program.

Project Team
The ETAP team was designed to facilitate communication with New Hampshire communities as well as to provide meaningful, useful technical assistance to those communities. The team consisted of:

- **CLF Ventures, Inc.** – CLFV, a non-profit consulting subsidiary of the Conservation Law Foundation (CLF), provided overall program management for ETAP, managing all aspects of the project administration and finances with OEP, marketing the program to New Hampshire communities, and providing facilitation to New Hampshire municipalities to engage them in the program and management of subcontractors. In addition, CLFV provided final reporting for the program, including delivery of a database of work conducted and an extensive report on how to provide financing to New Hampshire communities for the over $10 million in municipal EE projects identified by ETAP. Jo Anne Shatkin was the overall manager of the program for CLFV, with day-to-day project management provided by Eric Halter, based in CLF’s Concord, New Hampshire, office.

- **Peregrine Energy Group (PEG)** – PEG was the primary technical assistance provider for ETAP. The for-profit company, based in Boston, Massachusetts, made its web-based energy inventory tool, Peregrine Focus, available for use by all participating communities, and provided engineers
CLF Ventures, Inc.  September 5, 2012

with expertise in building systems, ESCO management, power purchase agreements, RFP creation/review, and other technical skills. Steve Weisman of PEG provided overall management of the PEG effort for ETAP. Paul Gromer led their inventory work.

- **NH’s Regional Planning Commissions (RPCs)** – The state’s nine RPCs were active team members of ETAP, performing two roles. First, the RPCs, given their local knowledge of and experience with their member municipalities, acted as the “on-the-ground” contact point and interface with New Hampshire cities and towns. This was invaluable in winning the confidence of New Hampshire communities and greatly improved the success of the program. In addition, the RPCs provided planning technical assistance to New Hampshire communities, including writing energy chapters of master plans, conducting regulatory audits, and helping municipalities compile energy inventory data.

- **Clean Air Cool-Planet (CACP)** – At the time the ETAP program started, this Portsmouth, New Hampshire-based nonprofit was administering the Municipal Energy Assistance Program (MEAP) to select municipalities in the state. CLFV engaged with CACP to ensure that energy inventory information collected during the MEAP program was made available in Peregrine Focus, to coordinate with CACP on the technical assistance that they already provide to New Hampshire communities, and to assist CACP in supporting the Local Energy Solutions (LES) conference, which showcases EE work undertaken by New Hampshire communities and provides a forum for community leader to share ideas on EE improvements.

**Major aspects of program**
The ETAP program, as defined in the RFP from OEP, presented several unique challenges: how to 1) engage as many New Hampshire communities as possible, 2) provide meaningful technical assistance that would initiate productive EE projects and thus reduce energy consumption and cost, as well as associated greenhouse gases in the state, and 3) complete the work within the two-year life span of the program.

**Overview**
CLFV and the project team designed the program to address the challenges noted above, by working with the abilities and strengths of the team members to achieve two goals: maximize the engagement of municipalities and maximize the effectiveness of the technical assistance provided. This is illustrated through the following sequence of steps employed by ETAP to engage municipalities in the program:

- CLFV developed marketing materials for distribution to municipalities to describe the program and its benefits, as well as a website (www.etapnhc.com) to inform communities about ETAP. CLFV and PEG representatives also spoke at the 2010 and 2011 Local Energy Solutions Conferences and had a table with information and materials available to participants. Copies of the materials are attached in Appendix A.

- Each RPC acted as the local agent for spurring interest in its member towns, doing the initial outreach and marketing, holding initial program meetings, enrolling municipalities, and in some cases, acting as the local facilitator for technical assistance. The CLFV program manager, Eric Halter, attended most of these initial meetings.
• The first step in the program was for municipalities to collect energy inventory information on their municipal buildings and supply that information to PEG for use in the inventory tool. This process is described in detail in a separate report on the inventory tool by PEG and included as Appendix B. Later in the program, the RPCs also assisted in the collection and submittal of energy inventory information. In cases where communities were not members of RPCs, and in the case of New Hampshire counties, this step was conducted by CLFV and PEG.

• Once a community was enrolled in the program and inventory information was collected, CLFV coordinated with PEG, the RPC, and the town to determine the technical assistance required and schedule any necessary field work. The types of work conducted will be discussed in more detail below. Initially, in order to ensure that as many towns as possible were able to take advantage of the program, municipalities were limited to one type of technical assistance. As the program progressed, some communities received additional technical assistance as budget allowed.

• Once the technical assistance was provided, PEG and the RPCs conducted follow-up with the municipality to see if any additional assistance was required.

• At the close of the program, closure surveys were conducted with all municipalities to see which ETAP-identified projects were actually initiated and completed and to gauge satisfaction with the program. Energy inventory data was also provided back to the communities, since the Peregrine Focus tool was only available to the participating municipalities over the duration of the ETAP program.

Energy Inventory and use of Peregrine Focus
A major feature of the program was the ability of communities to track energy usage for their municipal buildings through the Peregrine Focus tool, a web-based tool with highly informative reporting and graphic display capabilities. This was an optional step for a community but strongly encouraged. Of the 127 communities that participated in the ETAP program, 47 (37%) used the Peregrine Focus tool. The use of this tool in the program is described in detail in Appendix B.

Technical Assistance
As mentioned above, the major technical assistance (TA) for ETAP was provided by PEG with some technical assistance provided by CLFV or an RPC. This technical assistance took the following forms:

• “Building Assessments” – By far, the main form of technical assistance provided was EE assessment of municipal and county buildings. Early in the program, ETAP decided to not conduct full ASHRAE-level audits in order to be able to assess more buildings and extend available funding. The building assessments were designed to educate a community on the major EE issues its buildings faced, identify the costs involved to remediate any ETAP-identified issues, and estimate the energy savings that could be realized if recommended EE improvements were completed. The goal was to identify the major energy issues in as many buildings as possible in a given town or county so the community could review the major issues, set priorities, and locate funding based on ETAP estimates of work costs.

• Specification Creation, RFP Creation/Review – In some cases, communities ready to implement identified EE improvements required specific technical assistance to move the project forward.
PEG provided a variety of these types of services, including creating bid specifications, writing project RFPs, and assisting the review and selection of proposals from bidders.

- **Review of Building Plans** – PEG reviewed design plans for new municipal buildings to assess the EE components of the design and to recommend changes, if required.

- **Power Procurement** – In one case, PEG helped several communities reduce their energy spending by providing technical assistance to the communities to issue an RFP and select an electricity provider who would guarantee a lower rate to these communities based on their ability to pool their energy needs.

- **Grant Writing Assistance** – Some communities were ready to undertake ETAP-identified EE improvements but lacked funding to execute the projects. In these cases, CLFV provided assistance in locating funding sources as well as writing grants to apply for these funds.

- **Transportation** - In one case, ETAP assisted a town in the planning of a park-and-ride facility in their community.

- **Planning Assistance** – Many towns had already made great strides with their public buildings but wanted to foster additional EE savings in their communities. In these cases, the RPCs provided the following technical assistance:
  - **Energy Chapter of Master Plans** – RPCs assisted communities in writing energy chapters, and in some cases reviewing and modifying the entire master plan to encourage EE improvements.
  - **Regulatory Audits** – RPCs reviewed municipal regulations to identify areas where building codes, zoning requirement, or other rules might be impeding EE projects and made recommendations to modify these rules.
  - **Local Energy Committee (LEC) Creation** – Where communities did not have Local Energy Committees, RPCs assisted in creating these committees and gaining approval from local governments.

- **EE Financing** – As part of the final reporting for ETAP, CLFV conducted research and made recommendations to OEP on potential financing mechanisms for ETAP-identified EE projects in New Hampshire. This report was delivered on July 31, 2012.

**Extent of Enrollment and Participation**
Initially, ETAP was open to all municipalities and counties in the state for municipal buildings only. As the program progressed, school districts, and especially communities with their own elementary school(s), requested that their school buildings be eligible to participate in the program. After discussion with OEP, school buildings became eligible for ETAP technical assistance.

**Program Results**
In summary, CLFV and the project team agree that the program was successful in reaching a majority of New Hampshire communities and providing them useful information and technical assistance on potential projects to improve the energy efficiency of their buildings. While an overall success, there were areas of challenge, and some program elements were modified from the original design based on realities encountered in the field. This section summarizes the results of the program, outlining the
accomplishments and the challenges to program success. It also provides the results of surveys and interviews with municipal officials who were recipients of ETAP technical assistance.

As part of the closure process for this program, a web-based survey was sent to all contacts in municipalities and counties that participated in the program. A total of over 300 request emails were sent, and 50 ETAP participants responded, a 16.6% response rate. In addition, CLFV conducted phone interviews with 14 participants, who were selected based on input from RPCs. The responses to the survey and to the phone interviews are summarized throughout this analysis where they pertain to the discussion of program results. A summary of the online survey results is included in Appendix C.

**Success Rate of the Program**

235 towns and 10 counties combined made up a total of 245 potential recipients of ETAP services. Tables 1-3 report different measures of success for ETAP in New Hampshire. Figures 1 and 2 show the extent and type of TA provided. As shown in Table 1, TA was provided to over 50% of NH municipalities and counties, a tremendous success rate. However, less than half were included in the inventory.

Table 1 shows the number of towns and counties that received TA and the percentage of those that started or completed TA. The table indicates a high success rate for TA in both NH's Congressional Districts.

Table 2 shows that on a population basis, the ETAP program impacted the communities of close to 75% of New Hampshire’s residents.

Table 3 reports that success rate for TA were high in both of New Hampshire’s Congressional Districts.
As can be seen in Figure 1, EE Technical Assistance was provided in all regions of the state.

Figure 1 - Map of New Hampshire, with towns that participated in ETAP in blue. Towns in grey have populations of 0-100 and were not included in ETAP.
Figure 2 demonstrates the diversity of TA provided. By far, building assessments were most frequently provided. However, Master Planning/Reg. Review was also popular, as were services related to Energy Procurement.

Of the 235 New Hampshire municipalities and 10 New Hampshire counties to which ETAP outreach was directed, 56% received services from the program. This translates to 120 municipalities and 7 counties, as shown in the tables above. The program served a total of 135 entities, which includes the above-mentioned municipalities and counties as well as buildings in the 15 school districts that also participated in the program. The success of the program is even higher if viewed as a percentage of population of the state. ETAP worked in communities that represent over 70% of the population of New Hampshire, based on 2010 census data.

By far the largest area of technical assistance was building assessments. A total of 336 buildings were assessed as part of ETAP in 104 New Hampshire communities, and a total of over $10 million of EE projects were identified. There were a total of 86 other types of TA conducted in 67 communities. As the data suggest, many communities received multiple forms of technical assistance. For instance, communities might have received a building assessment and then follow-up assistance for specification creation/review or planning assistance.

**Public Reaction to ETAP**
70.8% of respondents to the online survey of program participants said they were either completely satisfied or satisfied with ETAP. In general, participants felt that the program worked well, helped them focus on EE initiatives, and aided them in getting projects off the ground. All of the participants
interviewed by phone felt that the program had been helpful in identifying their EE priorities. They also noted that the building assessments were the best part of this assistance, as the assessments identified short-term, operational changes that could be made quickly, as well as longer-term capital projects.

Another positive aspect noted in both the online surveys and phone interviews was the responsiveness of the program. Phone interviewees noted the willingness of ETAP technical assistance providers to listen to their needs and be timely in getting TA accomplished. In addition, respondents to the online survey stated that the second most satisfying aspect of the program (after technical assistance) was having the RPCs act as the local representative of the program. This view was echoed in the phone interviews as well. The use of the RPCs in this role was a major factor in winning local trust and early adoption of the program, and should be considered a key ingredient to the success of any future state-wide EE programs.

The clear challenge in the program, as represented in the graphics above, was the energy inventory process. Only 47 towns completed the collection of energy inventory data and used the Peregrine Focus tool to track their energy usage. 68% of respondents to the online survey identified the collection of energy inventory information as the most challenging aspect of the ETAP program.

There are several factors that contributed to lack of adoption of the energy inventory process. Energy information for most towns is still in the form of paper bills that are filed away and have to be retrieved and reviewed to create an energy history of buildings. In addition, public utilities in New Hampshire were not forthcoming with providing digital versions of energy usage information in bulk downloads to PEG, a key element of the success of this part of the program. Without this digital download, municipalities were required to conduct hand entry of information or PEG was required to enter separate digital files from utilities, where the files could be obtained for individual communities. Finally, many towns did not see the value of taking the time to do this work or did not have the capacity to do so.

**Project Initiation and Energy Savings**

As stated above, ETAP identified over $10 million in potential projects to increase EE in over 330 public buildings in 135 communities. As part of the closure of the program, CLFV returned to all communities ETAP provided assistance to and reviewed with them which projects they had completed and which projects they were planning to undertake.

A total of 25 communities have either completed or plan to complete ETAP-identified projects in the next year. Table 4 below summarizes this information, along with the projected energy savings based on building assessments conducted by PEG.
Table 4: ETAP Estimated Energy Savings from ETAP-identified projects

<table>
<thead>
<tr>
<th>Projects ID'd by ETAP and completed by communities</th>
<th>Electricity Saved</th>
<th>Natural Gas Saved</th>
<th>LP Gas Saved</th>
<th>Fuel Saved</th>
<th>Total $ Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>291,548 kWh/yr</td>
<td>2,606 therms/yr</td>
<td>7,896 Gal/yr</td>
<td>7,071 Gal/yr</td>
<td></td>
<td>$95,740/yr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projects ID'd by ETAP and planning for completion by communities in the next year</th>
<th>Electricity Saved</th>
<th>Natural Gas Saved</th>
<th>LP Gas Saved</th>
<th>Fuel Saved</th>
<th>Total $ Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>49,452 kWh/yr</td>
<td>1,070 therms/yr</td>
<td>1,344 gal/yr</td>
<td>1,030 gal/yr</td>
<td></td>
<td>$16,529/yr</td>
</tr>
</tbody>
</table>

The philosophy of the project team was to not only identify projects, but do everything possible to see that projects were initiated and completed. Ultimately, this approach was not as successful as the team would have liked; the main reason for this was the lack of funding available for communities to move forward with ETAP-identified projects. Our online survey and phone interviews also support this view.

In the online survey, when asked why communities had not moved forward with EE projects, the number one reason identified was the community’s inability to identify and secure project funding. When asked what would have made ETAP easier and more successful, 72.2% of respondents said that identifying and securing funding of projects was the number one area for improvement; the second was a lack of time by community government staff to manage these projects. Phone interviews with community officials also echoed this sentiment, with all interviewees stating that funding projects was the major obstacle to moving EE projects forward.

**Conclusion**

The ETAP program identified over $10 million in potential energy efficiency projects across New Hampshire, increasing energy efficiency in over 330 public buildings in 127 communities. The program was successful by many measures – electricity savings, natural gas and fuel savings, total dollar savings – achieving its goal of improving the energy performance of many public buildings across the state.

Providing technical assistance was a fundamental first step for advancing EE improvements in many New Hampshire communities. However, the inability of municipalities to secure implementation funding has the potential to sap the momentum created by identifying potential EE projects and could therefore severely curtail or stop this work from being a priority for New Hampshire communities.

To help New Hampshire continue to pursue its objectives of reducing municipal energy use in the state even after stimulus funding has ended, ETAP has provided NHOEP with an energy efficiency financing report intended to maintain the momentum generated by the ETAP program. The report explores innovative municipal EE financing options and recommends how NHOEP might structure and finance EE technical assistance to New Hampshire municipalities once the ETAP program has ended.

Future programs to provide technical assistance should be coupled with a means of funding projects to make sure they move forward to completion before shifting community priorities shift the focus of government officials away from energy efficiency. This is the major lesson learned from the program.
Appendix A: Marketing Materials
Helping NH communities increase their energy efficiency

Energy Technical Assistance and Planning for New Hampshire Communities (ETAP) is a two year program providing energy efficiency technical assistance at no charge to municipalities and counties in NH. ETAP’s goal is to advance energy efficiency in all New Hampshire municipalities and provide the tools communities need to monitor energy performance. ETAP is funded by the American Recovery and Reinvestment Act (ARRA) of 2009 and administered through New Hampshire’s Office of Energy and Planning.

The program is open to all NH towns, cities, and counties. Over the next two years, ETAP will:

- Assist participating NH communities to track and understand energy consumption in municipal and county buildings and other major energy uses
- Provide a web-based tool to communities to benchmark energy performance
- Work with communities to identify and prioritize energy cost reduction opportunities
- Help develop strategies for energy cost reduction and secure technical and financial resources needed to realize energy savings

Energy Technical Assistance available to participants includes:

- Energy efficiency planning based on the NH Energy Efficiency and Sustainable Energy (EESE) board “roadmap” through
  - Organizing energy information in ETAP’s web-based benchmarking tool
  - Helping define local roles and responsibilities for energy management
  - Identifying and prioritizing energy reduction opportunities
  - Developing an action plan for implementing a local program or individual projects
  - Determining costs and savings for projects
- Helping to secure resources needed for project development, through
  - Energy Assessments
  - Grant writing support
  - Development of procurement documents
  - Service procurement support
- Development of energy master plans and capital improvement plans for energy efficiency

Get started saving money and making your municipality more efficient today

Contact your local Regional Planning Commission, or Contact the ETAP Technical Assistance Coordinator, Eric Halter of CLF Ventures, via phone at 603-225-3060 x14 or via email at ehalter@clf.org.

More information available online at www.etapnhc.org.
1. **What is the ETAP program?**
   Energy Technical Assistance and Planning for New Hampshire Communities (ETAP) is a federally funded program designed to raise awareness in NH communities of the benefits of energy efficiency planning and to provide the tools they need to realize those benefits. The ETAP program can save tax payers money through reduced utility bills on municipal facilities and help reduce the environmental impacts of energy consumption. ETAP is funded by the American Recovery and Reinvestment Act (ARRA) of 2009 through the U.S. Department of Energy and administered by the NH Office of Energy and Planning.

The ETAP team is comprised of staff from twelve organizations: CLF Ventures, the non-profit consulting affiliate of the Conservation Law Foundation; Peregrine Energy Group, Inc., an energy consulting firm; the non-profit Clean Air- Cool Planet and the nine New Hampshire Regional Planning Commissions.

2. **What services can the program provide to my community?**
   ETAP will assist your community to manage energy use and identify opportunities for energy cost reduction. The ETAP team will work with local government representatives to help implement opportunities, strategies and technologies to reduce energy use, providing easy-to-use tools to track your community’s savings, and collaborating with them to identify the technical and financial resources required to develop projects.

3. **Does a community have to write a proposal to participate in the program?**
   No. Simply, contact your local Regional Planning Commission. Or contact the Technical Assistance Coordinator for the program, Eric Halter of CLF Ventures, via phone at 603-225-3060 x14 or via email at ehalter@clf.org. You can get more information by visiting us online at www.etapnhc.org.

4. **Will there be a cost to my community to participate in ETAP?**
   No, there is no charge for participating in this program. But you will need to provide ETAP with access to municipal utility and other energy data. To initiate the process, authorized personnel need to sign a release of your municipal/county utility data to ETAP for inclusion into an inventory database.

5. **How much time will be required of local staff or volunteers if we participate?**
   Although ETAP is free, it does require active municipal participation, and the more a community is willing to get involved, the greater the benefit that will result. Your commitment of staff and/or volunteer time and resources could vary with your community’s interests and priorities and where you are in energy planning and implementation. Community involvement is a key to ultimate success. For greater efficiency, we will make efforts to establish roles and responsibilities from the onset, as well as assist in securing the resources required for a successful program.

6. **How long do I have to join the program?**
   Early engagement in ETAP is encouraged to give the ETAP team the most time to determine your interests and opportunities and develop and implement strategies for energy cost reduction. Like other ARRA-funded programs, the project goes until mid-2012. Communities may register anytime in the first two years. We plan to provide assistance on a first-come, first-served basis.
Energy Technical Assistance & Planning
For New Hampshire Communities
Funded by the ARRA Energy Efficiency Conservation Block Grant

Increasing energy efficiency
for New Hampshire communities
www.etapnhc.org

Looking for ways to improve energy efficiency in your community and reduce your municipal utility bills? Participate in Energy Technical Assistance and Planning for New Hampshire Communities (ETAP), a two-year program providing energy efficiency technical assistance at no cost to NH municipalities and counties. ETAP's goal is to advance energy efficiency in all New Hampshire municipalities and provide the tools communities need to monitor energy performance. ETAP is funded by the American Recovery and Reinvestment Act (ARRA) of 2009 and administered through New Hampshire's Office of Energy and Planning.

Get started saving money and making your municipality more efficient today

Contact your local Regional Planning Commission, or contact the ETAP Technical Assistance Coordinator, Eric Halter at CLF Ventures, via phone at 603.225.3060 x14 or via email at ehalter@clf.org. More information available online at www.etapnhc.org.

Central New Hampshire RPC (CNHRPC) - 603.226.6020
Lakes RPC (LRPC) - 603.279.8171
Nashua RPC (NRPC) - 603.424.2240
North Country Council (NCC) - 603.444.6333
Rockingham PC (RPC) - 603.778.0885
Southern New Hampshire RPC (SNHRPC) - 603.469.4644
Southeast RPC (SWRPC) - 603.357.0557
Strafford RPC (SRPC) - 603.742.2523
Upper Valley-Lake Sunapee RPC (UVLRPC) - 603.448.1680

CLF Ventures, Inc.
27 North Main Street
Concord, NH 03301
**Hampton, NH:** The Hampton Energy Committee (HEC) has been concerned for several years with the inefficient heating, cooling, and lighting systems operating in the Town’s historic Lane Library. HEC contacted ETAP technical assistance provider, the Rockingham Planning Commission (RPC), who organized a meeting with the HEC, Library Director, Library Trustees, Town Manager, to talk about the current and future needs of the library. The decision was made to do an on-site assessment of the Library, the Town Office building, and Hampton’s main fire station, which Peregrine was able to do all in one day.

Peregrine Energy Group has provided the HEC with recommendations for new heating and cooling systems and for lighting throughout the building. Peregrine also assisted the HEC with drafting a “design/build” Request for Proposals for heating, cooling, and lighting. The ETAP program will also assist the HEC and town officials with reviewing the submissions to ensure the work proposed for the library provides energy cost savings for the long-term.

In addition to their focus on improving the energy efficiency of the Library, the HEC is working with the RPC to develop a plan for short- and long-term energy conservation projects. The Committee meets monthly and often has guest speakers on a wide variety of sustainability topics. These meetings are broadcast on the local cable access channel in order to pique community interest and inform residents of energy conservation opportunities.

**Nashua, NH:** In November 2010, the City of Nashua asked ETAP to evaluate current buying practices for electricity. Since its annual electricity bill is $2,750,000, the City wondered if it could save money by soliciting bids from competing energy suppliers.

ETAP’s technical assistance provider, Peregrine Energy Group, worked with the City’s Purchasing Department and the Office of the Mayor to analyze all municipal electrical accounts and drafted a request for proposals from qualified bidders. In December, 2010 the City released the RFP, requesting bids for 12- and 24-month time periods.

Peregrine handled all the technical details of the competition. They fielded questions from prospective bidders, drafted responses posted on the City’s website, and reviewed and compared the offers from competing suppliers, including their proposed contract terms and conditions. Peregrine has the needed expertise and experience to advise Nashua on which contract offered the best value.

As a result, Nashua executed two-year contracts that will reduce electricity expenses by $250,000 per year. This is a savings of 9 percent against the current total price for electricity and a savings of 22 percent against the cost for generation only (excluding transmission and distribution).

Interested in having your municipality participate in this free program? Visit us at [www.etapnhc.com](http://www.etapnhc.com) or contact your local Regional Planning Commission.
**Dover, NH:** The City of Dover has already done extensive energy efficiency work on its municipal buildings, but was looking for planning assistance that could help the entire community save energy. ETAP assistance provider Strafford Regional Planning Commission is currently working with the City of Dover on a regulatory audit to assist in this effort.

The regulatory audit will analyze the city codes in terms of regulations related to energy efficiency. This review of regulations will determine if Dover’s code encourages, discourages, or does not affect energy efficiency opportunities within the city. Recommendations will be provided to the City, and the information will be used in Dover’s Sustainability Plan.

ETAP also scheduled a site visit to the Dover Armory Building. The ETAP program did a high-level energy assessment and made recommendations for energy efficiency improvements.

**Colebrook, NH:** The town of Colebrook saw a great opportunity to utilize the North Country’s abundant and local biomass resources for a combined heat and power (CHP) plant for the town. The proposed plant would use local green wood chips and replace numerous oil and propane boilers in a new heating and power district in the center of the town. The proposed plant would be utilized for municipal buildings as well as businesses and residences. Before a plant of this type can move out of the planning stage, the town has to find money to do a feasibility study and has to figure out how it can afford to build the proposed biomass plant.

Colebrook lacked the staff or the time to research grant opportunities and write grant applications for this project, but ETAP was able to provide assistance with this process. CLF Ventures, the lead consultant in the ETAP program, is currently assisting the town, by identifying funding opportunities and writing several grant applications to NH-based sources to fund this feasibility study.

**Swanzey, NH:** Like many communities in New Hampshire, the Town of Swanzey has been working hard to reduce energy costs by identifying ways to improve the energy efficiency of its municipally owned buildings. One of these measures undertaken was the completion of decision grade audit of the Carpenter House, a two hundred year old farmhouse owned and managed by the Town as an elder care facility. The Town applied for, but did not receive, Energy Efficiency and Conservation Block Grant (EECBG) funds. It was around this time that the town heard about ETAP and contacted the Southwest Region Planning Commission (SWRPC) to request technical assistance.

After an initial meeting with representatives from the Town, Peregrine Energy Group conducted on-site assessments of 8 buildings, including the Carpenter House, to evaluate current energy use and identify opportunities for cost reduction. The ETAP program produced a detailed report that outlined recommendations and next steps to save energy, improve occupant comfort, and make needed infrastructure maintenance. The report included detailed cost estimates for suggested capital improvements and the estimated cost savings from these upgrades. Swanzey used these recommendations and cost estimates to allocate funding at this year’s town meeting and hopes to apply for a low interest municipal energy loan through the Community Development Finance Authority (CDFA) to make necessary improvements. Part of the funding the Town receives will go towards insulation at the Carpenter House. As Swanzey moves forward in planning for and implementing energy cost saving measures, the ETAP program will continue to provide technical assistance through the ETAP program.

**Pittsfield, NH:** Route 28 is a major commuting artery for communities east of Concord. The Town of Pittsfield has had its eye on a piece of property near its downtown that would be a perfect place to locate a Park-and-Ride. This facility would serve commuters in Pittsfield, Barnstead, Chichester, and other surrounding towns, as well as drawing traffic off of Rt. 28 and into downtown Pittsfield. Park-and-Rides provide meeting points for people who want to carpool or “rideshare,” thus reducing the number of single occupancy vehicles on the road and saving energy. The Town had found a site, but needed technical assistance to undertake an engineering and permitting study.

The staff of the Central NH Regional Planning Commission (CNHRPC), an ETAP technical assistance provider, met with Pittsfield officials to talk about how ETAP could support Pittsfield’s park and ride plans. The ETAP program provided the funding, and the CNHRPC developed a Request for Qualifications in March 2011 to find a firm to do the work. The study should be ready by June. With a design in place and preliminary permitting completed, Pittsfield will be ready to move ahead with securing financing and construction for the Park-and-Ride.

**Interested in having your municipality participate in this free program? Visit us at [www.etapnhc.com](http://www.etapnhc.com) or contact your regional planning commission.**
Appendix B: PEG Report on Peregrine Focus
Final Report for

Inventory Tool
for New Hampshire ETAP Program

Prepared by

Peregrine Energy Group, Inc.
Old City Hall
45 School Street
Boston, Massachusetts 02108
# Table of Contents

Introduction....................................................................................................................................................3

Inventory Tool Overview .................................................................................................................................3

Structure ..................................................................................................................................................3

Where the data comes from ....................................................................................................................5

Interactive dashboards & reports ............................................................................................................5

Implementation............................................................................................................................................9

Community setup....................................................................................................................................9

Ongoing support ......................................................................................................................................9

Challenges ................................................................................................................................................10

Participation .............................................................................................................................................10
Introduction

The Inventory Tool is a web-based energy information management and reporting tool that was made available to all New Hampshire cities and towns through the ETAP program. A customized version of a tool built by Peregrine Energy Group and already in use throughout New England, the Inventory Tool was fine tuned for use with municipal energy management planning. It gave New Hampshire communities a central location for managing energy data coupled with interactive reports that made it easy to establish an energy baseline, target inefficient facilities for efficiency efforts, and monitor energy use, costs, and emissions over time.

Inventory Tool Overview

Structure

Users visit the ETAP web site at www.etaphnc.org to log in. From there, they go to the Inventory Tool home page, where they can navigate to different parts of the system depending on their task:
View dashboards & reports

Users can quickly identify what is most important in municipal data – for example, which buildings are least efficient, how use and spending compare with previous years, and whether use and costs are trending upward or downward for the current year. Reports can be exported as PDF files or images, and the data behind each report can be downloaded as a .CSV file for further analysis.

Organize data

A series of data entry screens provide a user-friendly frontend to a powerful database that centralizes energy data for each participating municipality. Users can enter and update energy data by account, then organize the data to determine how it appears in reports.
Upload a spreadsheet

For users with a large amount of energy data to enter, the spreadsheet upload feature allows them to enter it in bulk rather than entering it one account at a time.

EPA Portfolio Manager integration

The Inventory Tool integrates fully with Portfolio Manager. It can download data directly from Portfolio Manager and display it in within Inventory Tool reports, or upload directly to Portfolio Manager, allowing communities to use both systems without requiring a separate data load for each system.

System security

The maintenance of data privacy is an important concern for participating cities and towns. To protect this privacy, each user is required to be authorized by their community and then given a unique username and password. Additional steps were taken to ensure data security on the backend, including PGP file encryption, placing servers behind a private firewall, and using security software.

Where the data comes from

The energy data in the Inventory Tool comes from three primary sources:

1. **Utility data files:** Through a collaborative effort between CLFV, municipalities, Regional Planning Associations, and Peregrine, two to three years of electronic data files were requested from New Hampshire utilities. When received, these files were loaded directly into the Inventory Tool as part of each community's initial setup process. After setup, this data was updated by Peregrine on a roughly quarterly basis for the duration of the project, using the utility web sites as a source for the data.
2. **Portfolio Manager:** Integration with EPA’s Portfolio Manager allows MassEnergyInsight to automatically load data from Portfolio Manager on a regular basis for those communities that wish to use both systems.
3. **User input:** Non-utility data, such as oil or propane, is entered by individual communities, using their energy bills.

Interactive dashboards & reports

The Inventory Tool’s dashboards and reports were designed specifically to make complex energy data easy for municipal users — energy experts and non-experts alike — to understand and use. Onscreen filters took advantage of the web’s interactivity and allowed users to modify the way charts and graphs display their data with a single mouse click. Screens redrew on the fly, no waiting for a new query to run.
Each dashboard and report was built around a specific energy-management-related task. For example:

**Compare use with a baseline year**

The Baseline Dashboard combined a selection of reports into a single view. Users could compare energy use to a baseline year using a combination of bar charts and numerical tables, then figure out which departments or facilities drive that use.

**Benchmark within a community**

The Inventory Tool made it easy for communities to compare the efficiency of buildings within their community. For example, in this quadrant report, buildings with the highest use and worst efficiency cluster in the upper right quadrant, making them easy to identify and target for energy efficiency measures.
Compare use, cost, and emissions across facilities

Color-coded bar charts made it easy to compare facilities use, cost, and emissions across a community and could be sorted by any of those categories – for example by use per square foot (rear image) or by cost (front image).

Identify trends

Straightforward visuals let users track trends without getting lost in the details. In this building use report, the grey line is a 12-month rolling sum, which allows users to see overall whether use is increasing or decreasing over time for this building.
Understand what is – and is not – normal

The use of color allowed users to compare use patterns from year to year and catch anomalies. This report shows annual use patterns for each fuel used; color indicates the year. When users clicked on a year in the color legend, the screen redrew so that only that year is colored, and other years were muted.

Compare this year to last

The blue bar shows current energy use and cost. The yellow bar shows last year’s total use and cost. If the blue bar is past the red line, then this year’s use is greater than it was at the same time last year.

Interactive drill-down features let users decide whether to view data in the aggregate or to explore the data at a more detailed level, such as by individual department or even individual accounts.

Getting the details is fast. Users can click near the City column header to expand the report and discover which department is driving an overage. In this example, it’s the school department.
Implementation

Community setup

For each community, the Inventory Tool setup process involved the following steps:

Completion of the ETAP Enrollment Form: Completion of this form general signified a community’s interest in participating in the Inventory Tool portion of the ETAP program and kicked off the setup process. Drafted in response to requests for a formal commitment from each community to the setup process, the form simply asked communities to affirm their willingness to participate in acquiring all data necessary for Inventory Tool setup. (See Appendix A.)

Initial data upload: To accelerate each community’s ability to use the Inventory Tool, CLFV, the Regional Planning Associations, each community, and Peregrine worked with local utilities to obtain two to three years of utility data in electronic files for each community. Communities completed a Utility Data Authorization Form to expedite this process, which gave the utilities authorization to share the data. (See Appendix B.)

For those utilities that did not provide electronic data files directly to Peregrine, Peregrine pulled as much data as was possible from the utility web site, using each community’s online profile.

User authorization: Communities completed an End User Authorization form (see Appendix C), which designated specific municipal employees and/or energy committee members as authorized users of the Inventory Tool. This authorization process protected data privacy for each community by ensuring that each user was approved by that community and had a unique login.

Training: Prior to first using the Inventory Tool, authorized users were invited to participate in a 1 ¼-hour webinar, during which they were introduced to the tool and how to use it and given opportunities to ask questions. Peregrine delivered 6 webinar trainings between December 2010 and June 2011 to a total of 38 participants across 27 communities.

Beginning in fall of 2011, training was instead made available via 31 on-demand videos to increase the flexibility of when training was available and to expand its reach. Each only a few minutes in length, the videos were made available from within the Support section of the Inventory Tool, and new users could take advantage of them whenever was best for their schedule.

Ongoing support

Customer support: Email- and phone-based customer support are provided by dedicated, experienced staff at Peregrine Energy Group who respond to calls and emails within a business day. Support is available for any kind of question, from the most basic to the most complex to make sure that all users, regardless of their energy knowledge or computer literacy skills, are comfortable and successful using MassEnergyInsight. Users can access Support whenever needed using the Web-based form in the Support section, or by emailing or calling directly.

After setup, utility data was updated by Peregrine on a roughly quarterly basis for the duration of the project, using the utility web sites as a source for the data.
Challenges

The four primary challenges that arose with the Inventory Tool implementation are challenges that face almost any effort to collect and analyze energy data:

1. **Identifying all utility accounts**: With multiple people across different departments responsible for utility bills, creating a master list of all accounts for a municipality can present a significant challenge.

2. **Aligning accounts with facilities**: Because utilities do not necessarily identify accounts using a name or address familiar to the town, it can be difficult to know which accounts match which facilities. This alignment is essential in order to understand the energy performance of a given facility.

3. **Gathering building information**: Building square footage is a key component of calculating building energy efficiency, but that information is not always readily available or easy to find.

4. **Utility data collection**: Utilities are not uniform in how they make energy data available electronically, if they make it available electronically in the first place. Utility web sites and customer service organizations can be difficult to navigate in order simply to access a data file, and then the file may be incomplete or in a format that is not easy to import into a database.

These challenges are met through simple persistence - putting in the time to locate, understand, and clarify the data.

Participation

The table below offers a snapshot of New Hampshire municipal participation in the Inventory Tool:

<table>
<thead>
<tr>
<th>Authorized users</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total communities engaged</td>
<td>56</td>
</tr>
<tr>
<td>Buildings tracked</td>
<td>1,492</td>
</tr>
<tr>
<td>Energy accounts tracked</td>
<td>2,919</td>
</tr>
<tr>
<td>Electricity</td>
<td>&gt; 54 million kWh/year</td>
</tr>
<tr>
<td>Natural gas</td>
<td>&gt; 1.7 million therms/year</td>
</tr>
<tr>
<td>Oil</td>
<td>&gt; 630,000 gallons/year</td>
</tr>
<tr>
<td><strong>Total energy spend</strong></td>
<td><strong>$10.5 million/year</strong></td>
</tr>
</tbody>
</table>
APPENDIX A

PARTICIPATION FORM

Welcome to the Energy Technical Assistance & Planning for NH Communities (ETAP) program. The program provides free energy efficiency technical services to help your municipality with energy efficiency planning. To be effective, the program requires a certain amount of involvement from your municipal staff and/or local energy committee, as well as an understanding of how the data that you authorize us to collect will be used.

This document outlines this information, and your signature indicates your understanding of and willingness to work within the program framework.

Your Participation – The ETAP program asks for municipal/county involvement in the following activities:

- Collection of historical municipal/county energy use data for use in the Energy Inventory Tool. This includes completion and submission of the following to Peregrine Energy Group:
  - Building and Accounts spreadsheet, which aligns account numbers with building names and info, and provides historical use information for fuel oil and propane.
  - Usernames and passwords for online utility profiles with PSNH, National Grid, and/or Unitil.
  - For customers of New Hampshire Electric Co-op, one fiscal year of utility bills.
  - Portfolio Manager username & password, if used by the community.
- Ongoing entry of new use data for non-utility fuels (fuel oil, propane) into the Energy Inventory Tool.
- Cooperation of municipal officials for access to municipal buildings for the purposes of conducting assessments of municipal buildings for energy efficiency.

Your Data – The program asks you to provide data on energy use, cost, and consumption for municipal buildings and, if you request, for streetlights and vehicle fleets. This energy data will be accessible to the New Hampshire Office of Energy and Planning and its contractors, CLF Ventures and Peregrine Energy Group, and any of CLF Venture’s subcontractors that require access to the data as part of this program. Access to the data will also be provided to the individual who signs this document and to municipal/county personnel named in any signed End User Authorization forms. The data will not be released to other outside parties.

Please Sign Below

My signature affirms that on behalf of the municipality that I represent, ____________________, I understand what is stated above, and I have the authority to engage my municipality in this program.

Signature
________________________________________

Name
________________________________________

Title
________________________________________

Date
________________________________________
APPENDIX B

UTILITY DATA RELEASE

In connection with our participation in the Energy Technical Assistance and Planning for NH Communities Program, ___________________________ (the “Municipality”) hereby authorizes ________________________ and ________________________ (the “Utility” or “Utilities”) to provide to the New Hampshire Office of Energy and Planning and its contractors CLF Ventures, Peregrine Energy Group, and any of CLF Venture’s subcontractors that require access to the data as part of this program, electricity and/or gas usage and cost data for all of our accounts with the Utility, including the accounts listed below. This authorization shall continue in effect until the Municipality notifies the Utility otherwise. The Utility is permitted to accept this authorization as authentic whether it is in paper or electronic form. My signature affirms that I have the authority to make and sign this request on behalf of the Municipality.

Signature

Name

Title

Date

Accounts (enter below or attach list)

<table>
<thead>
<tr>
<th>Utility</th>
<th>Fuel (electricity or gas)</th>
<th>Account number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

ENERGY INVENTORY TOOL END USER AUTHORIZATION

Users of the Energy Inventory Tool will be required to provide a user authorization letter to Peregrine Energy Group prior to gaining access to the system. The purpose of the authorization letter is for the municipality to verify which officials are authorized to access the municipal energy data that is included in the Energy Inventory Tool.

Requirements
- Please submit the user authorization letter on your official municipal / county letterhead, or apply an official town stamp or raised seal to the paper that you print it on.
- The user authorization letter must be signed by an official having the authority to designate the users of this system.
- The user authorization letter must state the following. Please cut & paste this text into your own paper:

Date

Peregrine Energy Group
Old City Hall
45 School Street
Boston, MA 02108

RE: User authorization: Energy Inventory Tool for ETAP New Hampshire

To Whom It May Concern:

I, _______________________________ hereby authorize:

Name: _______________________________ Name: _______________________________
Title: _______________________________ Title: _______________________________
Email: ______________________________ Email: ______________________________

Name: _______________________________ Name: _______________________________
Title: _______________________________ Title: _______________________________
Email: ______________________________ Email: ______________________________

Name: _______________________________ Name: _______________________________
Title: _______________________________ Title: _______________________________
Email: ______________________________ Email: ______________________________

to receive full access to the energy data for the Town / City / County of ____________________________ that is included in the Energy Inventory Tool for ETAP New Hampshire.

Signature

Title
Appendix C: Results of Online Survey of ETAP Participants
### EECBG Grants and ETAP Survey

**What role do you play in your municipality or school district? (Select from drop-down menus below)**

#### Municipality

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Selectperson</th>
<th>City Councilor</th>
<th>City Manager</th>
<th>Town Manager/Administrator</th>
<th>Local Energy Committee/Commission</th>
<th>Capital Improvements Committee</th>
<th>Planner</th>
<th>Public Works Director/Road Agent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your role</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>23</td>
<td>21</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>66</td>
</tr>
</tbody>
</table>

#### School District

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>School Board Member</th>
<th>Business Administrator</th>
<th>Superintendent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your role</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Other (please specify)

<table>
<thead>
<tr>
<th>Question Totals</th>
<th>Answered question</th>
<th>Skipped question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70</td>
<td>37</td>
</tr>
</tbody>
</table>
**EECBG Grants and ETAP Survey**

**What is the estimated population of your municipality or school district?**

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 2,000</td>
<td>19.8%</td>
<td>20</td>
</tr>
<tr>
<td>2,000-4,999</td>
<td>30.7%</td>
<td>31</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>20.8%</td>
<td>21</td>
</tr>
<tr>
<td>10,000-19,999</td>
<td>9.9%</td>
<td>10</td>
</tr>
<tr>
<td>20,000-50,000</td>
<td>8.9%</td>
<td>9</td>
</tr>
<tr>
<td>≥ 50,000</td>
<td>9.9%</td>
<td>10</td>
</tr>
</tbody>
</table>

*answered question 101*

*skipped question 6*
## EECBG Grants and ETAP Survey

### What is the annual operating budget of your municipality or school district?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>$≤ 1 million</td>
<td>7.9%</td>
<td>7</td>
</tr>
<tr>
<td>$1m - $4.9m</td>
<td>36.0%</td>
<td>32</td>
</tr>
<tr>
<td>$5m - $9.9m</td>
<td>19.1%</td>
<td>17</td>
</tr>
<tr>
<td>$10m - $19.9m</td>
<td>5.6%</td>
<td>5</td>
</tr>
<tr>
<td>$20m - $50m</td>
<td>11.2%</td>
<td>10</td>
</tr>
<tr>
<td>$≥ 50m</td>
<td>9.0%</td>
<td>8</td>
</tr>
</tbody>
</table>

**answered question** 89

**skipped question** 18
What percentage of your municipal or school district annual budget typically goes to capital projects (i.e., projects that require the appropriation of additional funds over and above the current community budget)?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 1%</td>
<td>14.1%</td>
<td>12</td>
</tr>
<tr>
<td>1%-4.9%</td>
<td>30.6%</td>
<td>26</td>
</tr>
<tr>
<td>5% - 9.9%</td>
<td>18.8%</td>
<td>16</td>
</tr>
<tr>
<td>10%-20%</td>
<td>9.4%</td>
<td>8</td>
</tr>
<tr>
<td>≥ 20%</td>
<td>4.7%</td>
<td>4</td>
</tr>
<tr>
<td>Don't know</td>
<td>22.4%</td>
<td>19</td>
</tr>
</tbody>
</table>

answered question 85
skipped question 22
Did your grant-funded project and/or technical assistance help you achieve your energy or fuel efficiency goals?

- Yes
- No
## EECBG Grants and ETAP Survey

### Did the project result in:

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Yes</th>
<th>No</th>
<th>Expected</th>
<th>Don't Know</th>
<th>N/A</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced energy or fuel costs for your community?</td>
<td>50</td>
<td>2</td>
<td>22</td>
<td>4</td>
<td>6</td>
<td>84</td>
</tr>
<tr>
<td>Reduced fossil fuel emissions?</td>
<td>38</td>
<td>4</td>
<td>17</td>
<td>12</td>
<td>11</td>
<td>82</td>
</tr>
<tr>
<td>Reduction in energy use?</td>
<td>44</td>
<td>4</td>
<td>25</td>
<td>3</td>
<td>9</td>
<td>85</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

- **answered question:** 85
- **skipped question:** 22

![Bar chart showing results for different outcomes](chart.png)
## EECBG Grants and ETAP Survey

Which program did your municipality or school district participate in?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants only</td>
<td>42.5%</td>
<td>37</td>
</tr>
<tr>
<td>ETAP only</td>
<td>27.6%</td>
<td>24</td>
</tr>
<tr>
<td>Both programs</td>
<td>29.9%</td>
<td>26</td>
</tr>
</tbody>
</table>

Total responses: 87

Skipped question: 20

![Pie chart showing response percentages for EECBG Grants and ETAP Survey](chart.png)

- Grants only
- ETAP only
- Both programs
- Answered question
- Skipped question

**Which program did your municipality or school district participate in?**
## EECBG Grants and ETAP Survey

### Overall, how satisfied were you with the ETAP process?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfied</td>
<td>4.2%</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat unsatisfied</td>
<td>8.3%</td>
<td>2</td>
</tr>
<tr>
<td>Satisfied</td>
<td>16.7%</td>
<td>4</td>
</tr>
<tr>
<td>Completely satisfied</td>
<td>58.3%</td>
<td>14</td>
</tr>
<tr>
<td>Satisfied</td>
<td>12.5%</td>
<td>3</td>
</tr>
</tbody>
</table>

**Comments**

- **answered question**: 24
- **skipped question**: 83

### Pie Chart

Overall, how satisfied were you with the ETAP process?

- Unsatisfied
- Somewhat unsatisfied
- Somewhat satisfied
- Satisfied
- Completely satisfied
Did a Local Energy Committee/Commission (LEC) assist with your project?

Yes
No
**EECBG Grants and ETAP Survey**

What role did the Local Energy Committee/Commission play in your project?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>answered question</td>
<td>9</td>
</tr>
<tr>
<td>skipped question</td>
<td>98</td>
</tr>
</tbody>
</table>
Was the Local Energy Committee/Commission assistance helpful?

- Yes
- No
## EECBG Grants and ETAP Survey

Rate the most satisfying aspects of the ETAP program (Select up to three choices).

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Most satisfying</th>
<th>Second-most satisfying</th>
<th>Third-most satisfying</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>The registration process</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Having the Regional Planning Commission act as the</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1.00</td>
<td>12</td>
</tr>
<tr>
<td>Availability of the Peregrine Energy Inventory Tool for</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Using the Energy Inventory Tool to understand your</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1.00</td>
<td>8</td>
</tr>
<tr>
<td>The responsiveness of the ETAP team in scheduling and</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1.00</td>
<td>6</td>
</tr>
<tr>
<td>Technical assistance provided by Peregrine Energy</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1.00</td>
<td>11</td>
</tr>
<tr>
<td>Technical assistance and planning work provided by your</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1.00</td>
<td>8</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

answered question 20
skipped question 87

Rate the most satisfying aspects of the ETAP program (Select up to three choices).

- Technical assistance and planning work provided...
- The responsiveness of the ETAP team in...
- Availability of the Peregrine Energy Inventory Tool...
- The registration process
## EECBG Grants and ETAP Survey

Rate the most challenging aspects of the ETAP program (Select up to three choices).

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Most challenging</th>
<th>Second-most challenging</th>
<th>Third-most challenging</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection of building energy information for the inventory</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>1.00</td>
<td>15</td>
</tr>
<tr>
<td>Use of the Energy Inventory Tool (hard to use or difficult)</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>1.00</td>
<td>9</td>
</tr>
<tr>
<td>Communicating with the program on obtaining assistance</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1.00</td>
<td>7</td>
</tr>
<tr>
<td>Scheduling work to be done by the ETAP program in your scheduling</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>1.00</td>
<td>6</td>
</tr>
<tr>
<td>Working with Peregrine Energy during the technical assistance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Working with your Regional Planning Commission (RPC)</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*answered question 19  
skipped question 88*
Have you moved forward with implementing projects identified by the ETAP program for your building/facilities?

- Yes, capital projects (i.e., projects that require the appropriation of additional funds over and above the current community budget)
- Yes, maintenance and other non-capital projects (i.e., projects that can be accomplished within the appropriated building maintenance budget and/or with existing support/maintenance staff)
- Yes, both kinds of projects
## EECBG Grants and ETAP Survey

Rate the most challenging aspects of implementing the energy efficiency project(s) identified by the technical assistance provided by ETAP (Select up to three choices).

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Most challenging</th>
<th>Second-most challenging</th>
<th>Third-most challenging</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to identify funding for the project</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1.00</td>
<td>6</td>
</tr>
<tr>
<td>Unable to secure funding for the project</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>1.00</td>
<td>12</td>
</tr>
<tr>
<td>Staff too busy to devote time to the project</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1.00</td>
<td>9</td>
</tr>
<tr>
<td>Lack of cooperation and support between departments</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Lack of technical knowledge</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Lack of project development and management skills</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Confusion over how to finance the project</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Obtaining Town or City approval</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Lack of political support</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Failure to recognize the value of energy efficiency</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Lack of tools (such as RFP templates, sample contracts, Other (please specify below)</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*answered question 18 skipped question 89*
## EECBG Grants and ETAP Survey

### How could the ETAP program be made easier? (Choose all that apply)

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>More technical assistance with developing energy</td>
<td>11.1%</td>
<td>2</td>
</tr>
<tr>
<td>More technical assistance with the use of Peregrine's</td>
<td>38.9%</td>
<td>7</td>
</tr>
<tr>
<td>More technical assistance with identifying energy</td>
<td>33.3%</td>
<td>6</td>
</tr>
<tr>
<td>More technical assistance with finding contractors to</td>
<td>16.7%</td>
<td>3</td>
</tr>
<tr>
<td>Better follow-up after technical assistance work was</td>
<td>33.3%</td>
<td>6</td>
</tr>
<tr>
<td>More assistance in identifying and securing funding for</td>
<td>72.2%</td>
<td>13</td>
</tr>
<tr>
<td>More assistance from your Regional Planning</td>
<td>33.3%</td>
<td>6</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>5.6%</td>
<td>1</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

*Answered question: 18
Skipped question: 89*
**EECBG Grants and ETAP Survey**

NH OEP is considering creating a statewide energy efficiency coordinator role to help municipalities with energy efficiency projects. If an independent, third-party coordinator

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>78.2%</td>
<td>61</td>
</tr>
<tr>
<td>No</td>
<td>21.8%</td>
<td>17</td>
</tr>
<tr>
<td>Please explain</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

*answered question 78
skipped question 29*
## EECBG Grants and ETAP Survey

### Would your municipality be willing to pay a fee for this service?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37.7%</td>
<td>20</td>
</tr>
<tr>
<td>No</td>
<td>62.3%</td>
<td>33</td>
</tr>
<tr>
<td>Please explain</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

- **answered question**: 53
- **skipped question**: 54

---

![Pie chart showing the response distribution for the question: Would your municipality be willing to pay a fee for this service?](chart.png)

- **Yes**: [Bar A]
- **No**: [Bar B]
EECBG Grants and ETAP Survey

Will you perform energy efficiency improvements when supporting grant funds are no longer available?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>81.3%</td>
<td>61</td>
</tr>
<tr>
<td>No</td>
<td>18.7%</td>
<td>14</td>
</tr>
<tr>
<td>Please explain</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

answered question 75
skipped question 32

Will you perform energy efficiency improvements when supporting grant funds are no longer available?

- Yes
- No
## EECBG Grants and ETAP Survey

Rate the types of project(s) you would most like to implement? (Select up to three choices)

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Top priority</th>
<th>Second priority</th>
<th>Third priority</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air sealing of building envelope</td>
<td>14</td>
<td>8</td>
<td>11</td>
<td>1.00</td>
<td>33</td>
</tr>
<tr>
<td>Insulation</td>
<td>14</td>
<td>16</td>
<td>6</td>
<td>1.00</td>
<td>36</td>
</tr>
<tr>
<td>Heating/Ventilation/Air Conditioning (HVAC)</td>
<td>13</td>
<td>10</td>
<td>13</td>
<td>1.00</td>
<td>36</td>
</tr>
<tr>
<td>HVAC controls improvement/replacement</td>
<td>9</td>
<td>10</td>
<td>5</td>
<td>1.00</td>
<td>24</td>
</tr>
<tr>
<td>Lighting</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>1.00</td>
<td>28</td>
</tr>
<tr>
<td>Renewable energy (solar, wind, etc)</td>
<td>4</td>
<td>6</td>
<td>12</td>
<td>1.00</td>
<td>22</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

answered question 65
skipped question 42
**EECBG Grants and ETAP Survey**

**Rate the most challenging aspects of financing your energy efficiency building projects (Select up to three choices).**

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Most challenging</th>
<th>Second-most challenging</th>
<th>Third-most challenging</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited availability of funds</td>
<td>50</td>
<td>6</td>
<td>6</td>
<td>1.00</td>
<td>62</td>
</tr>
<tr>
<td>Private financing is not an option</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>1.00</td>
<td>15</td>
</tr>
<tr>
<td>Voter resistance to financing capital improvement</td>
<td>12</td>
<td>16</td>
<td>8</td>
<td>1.00</td>
<td>36</td>
</tr>
<tr>
<td>Lack of knowledge in locating and obtaining funding</td>
<td>3</td>
<td>15</td>
<td>9</td>
<td>1.00</td>
<td>27</td>
</tr>
<tr>
<td>Difficulty in understanding financing options and Return</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>1.00</td>
<td>14</td>
</tr>
<tr>
<td>Need to work with budget cycles</td>
<td>5</td>
<td>12</td>
<td>17</td>
<td>1.00</td>
<td>34</td>
</tr>
<tr>
<td>Other (please specify below)</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>Other/Comments</td>
<td></td>
<td></td>
<td></td>
<td>skipped question</td>
<td>75</td>
</tr>
</tbody>
</table>

**Answer Options**

- Limited availability of funds
- Private financing is not an option
- Voter resistance to financing capital improvement
- Lack of knowledge in locating and obtaining funding
- Difficulty in understanding financing options and Return
- Need to work with budget cycles
- Other (please specify below)
- Other/Comments

**Rating Scale**

- 0.00
- 0.50
- 1.00
- 1.50

**Answered Question**

75

**Skipped Question**

32
EECBG Grants and ETAP Survey

Would you consider working with other municipalities and/or school districts to aggregate your energy efficiency projects if it led to economies of scale and reduced implementation costs?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50.0%</td>
<td>39</td>
</tr>
<tr>
<td>No</td>
<td>7.7%</td>
<td>6</td>
</tr>
<tr>
<td>Don't know</td>
<td>29.5%</td>
<td>23</td>
</tr>
<tr>
<td>Would like to learn more (Please provide your contact information)</td>
<td>12.8%</td>
<td>10</td>
</tr>
<tr>
<td>Please explain</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

answered question 78
skipped question 29

Would you consider working with other municipalities and/or school districts to aggregate your energy efficiency projects if it led to economies of scale and reduced implementation costs?

- Yes
- No
- Don't know
- Would like to learn more (Please provide your contact information on the next page, or email michael.pais@nh.gov to request more information)
EECBG Grants and ETAP Survey

If there was a program available to implement energy efficiency improvements with no out-of-pocket costs to you, and the implementation costs were paid back from operating budget savings, would you participate?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61.5%</td>
<td>48</td>
</tr>
<tr>
<td>No</td>
<td>2.6%</td>
<td>2</td>
</tr>
<tr>
<td>Don’t know</td>
<td>23.1%</td>
<td>18</td>
</tr>
<tr>
<td>Would like to learn more (Please provide your contact)</td>
<td>12.8%</td>
<td>10</td>
</tr>
<tr>
<td>Please explain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

answered question 78  
skipped question 29

If there was a program available to implement energy efficiency improvements with no out-of-pocket costs to you, and the implementation costs were paid back from operating budget savings, would you participate?

- Yes
- No
- Don’t know
- Would like to learn more (Please provide your contact information on the next page, or email michael.pais@nh.gov to request more information)
Thank you for your participation. Your feedback helps NH OEP improve our energy efficiency programs. If you are willing to be contacted to answer some additional questions, please give us your contact information below.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>100.0%</td>
<td>39</td>
</tr>
<tr>
<td>Municipality</td>
<td>97.4%</td>
<td>38</td>
</tr>
<tr>
<td>Phone</td>
<td>94.9%</td>
<td>37</td>
</tr>
<tr>
<td>Email</td>
<td>97.4%</td>
<td>38</td>
</tr>
</tbody>
</table>

answered question 39
skipped question 68