



Button Up Final Report

Dec 1, 2011 – April 30, 2012

Executive Summary

The third season of Button Up NH weatherization workshops resulted in 34 regional workshops in 25 cities and towns throughout New Hampshire and reached more than 700 residents. The workshop series was coordinated by the University of New Hampshire in partnership with Clean Air-Cool Planet, Plymouth Area Renewable Energy Initiative (PAREI), UNH Cooperative Extension, and Lakes Region Community College. Button Up workshops are designed to teach residents the basics of home energy use and loss, the value of a home energy audit, the short term benefits of simple do-it-yourself weatherization, the long term benefits of extensive energy retrofits, and the technical and financial resources available to implement energy reduction projects. Workshops are conducted by Button Up NH trained energy professionals in collaboration with local workshop organizers. The program was initially developed in 2008 by Central Vermont Community Action Council with the support of Efficiency Vermont and the Vermont Energy and Climate Action Network. In 2009, it was modified and tailored to New Hampshire residents.

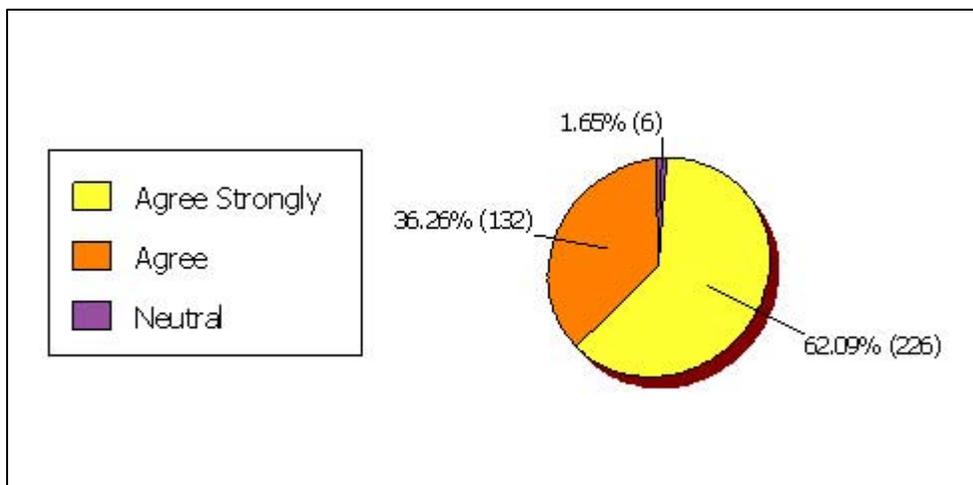
Assessment data has been collected throughout the project period. Assessments include workshop evaluations and post-workshop telephone interviews with past attendees. This final report summarizes the findings of these assessments, and together with evaluative tools from the first two years of Button Up, offers recommendations for moving the Button Up program forward. We have also included an evaluation of the PAREI Energy Advisor program, as well as the site visit reports submitted by the Energy Advisor volunteers.

A detailed assessment of the operational aspects of the Button Up program this year was submitted in our progress report on April 30, 2012 and is included as Attachment C to this report.

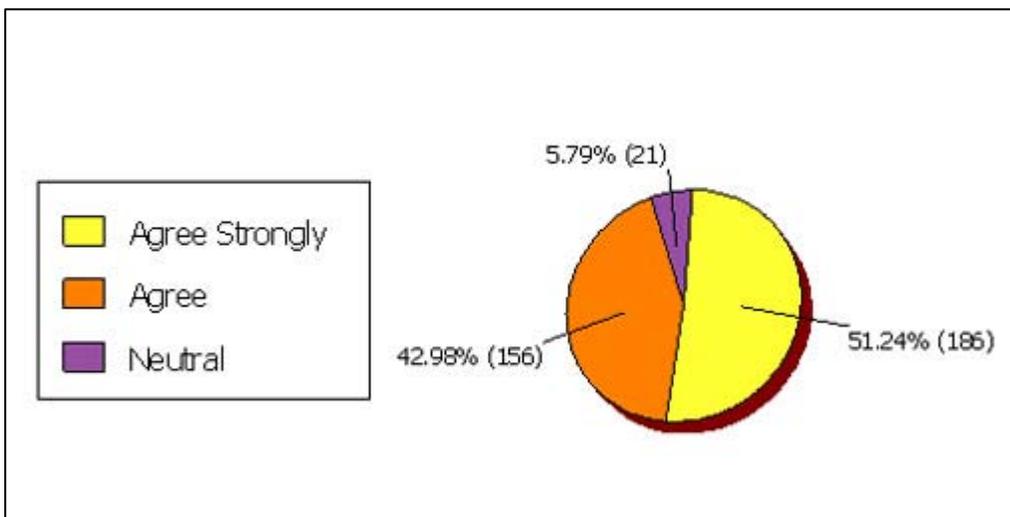
Summary of Workshop Evaluations

All Button Up attendees were asked to complete an evaluation of the workshop. The evaluation captured two essential pieces of information: the overall quality of the workshop and the overall impact of the workshop. The results indicate an overwhelming majority of workshop participants were happy with the structure and content of the workshop series, gave high marks to the workshop presenters, and would recommend a Button Up workshop to their friends/family/neighbors. Of equal note, most attendees indicated they understood some actions they could take to reduce their energy consumption, what resources were available to assist them, and that they did intend to take measurable actions to reduce their energy consumption. The information below is based on 371 completed evaluations:

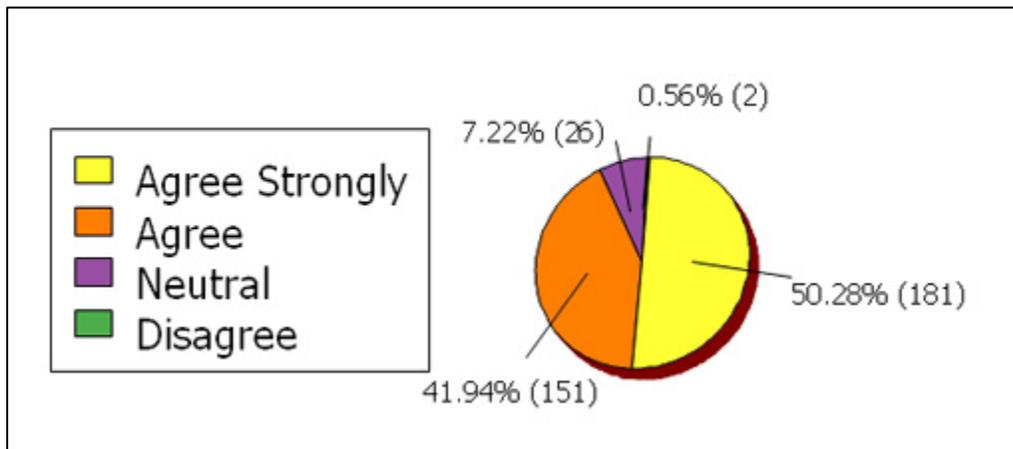
Question 1: I understand some actions I can take now to reduce my fuel bills:



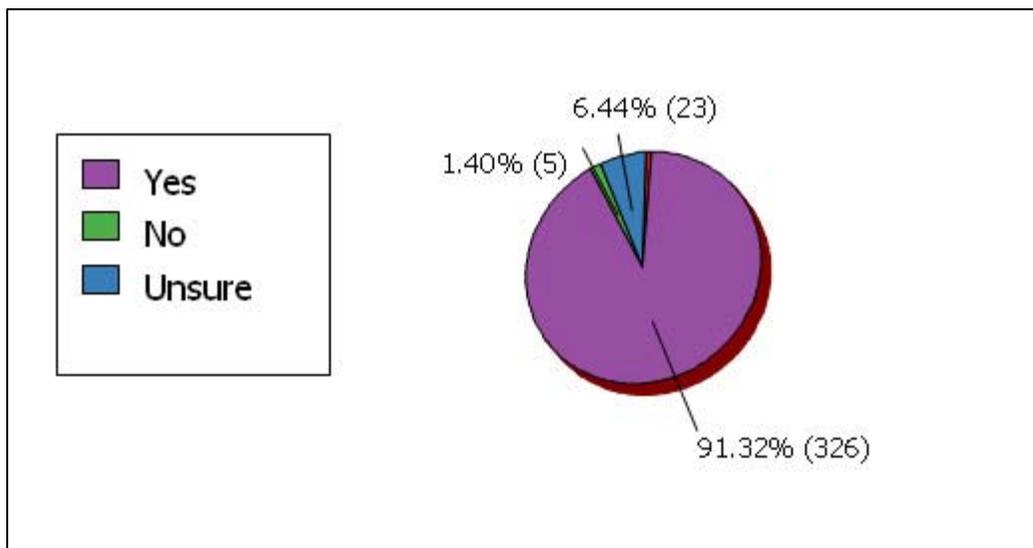
Question 2: I understand which solutions are most cost-effective for saving energy in my home:



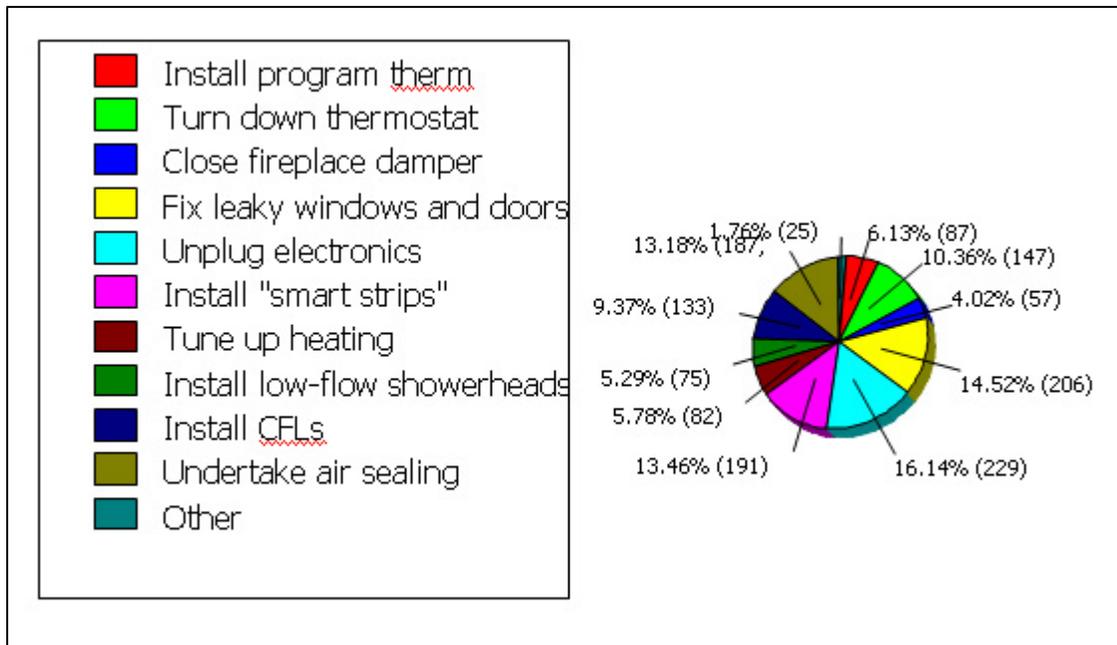
Question 3: I understand what I can do myself and when I need a professional as it relates to energy efficiency:



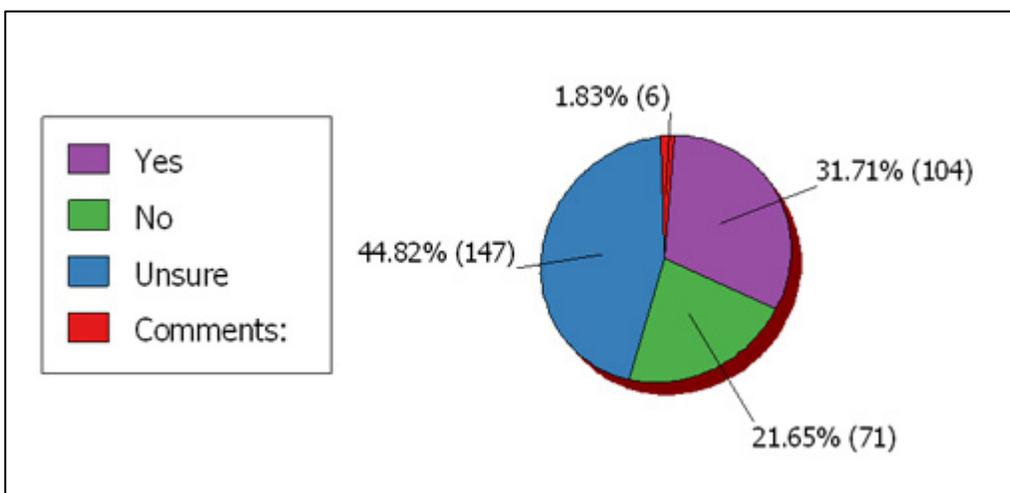
Question 4: I plan to take easy, low-cost steps to save energy in my home:



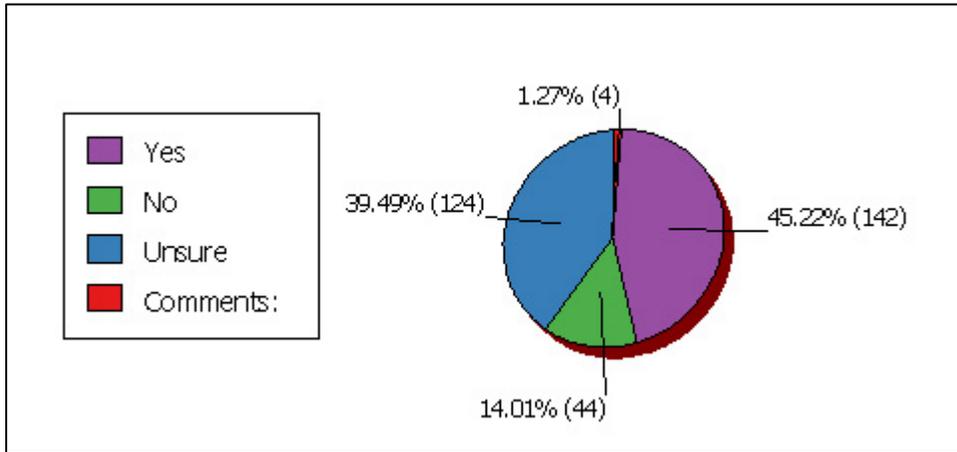
Question 5: The low-cost steps I plan to take include:



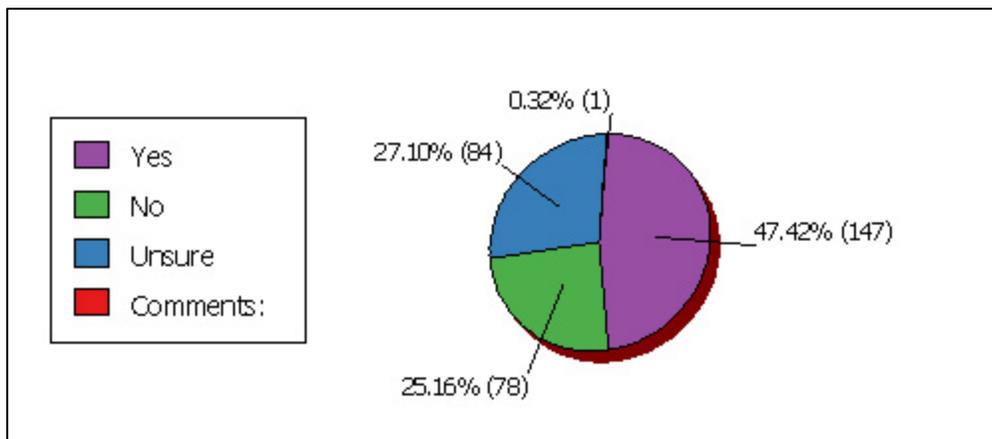
Question 6: I plan to have a professional energy audit:



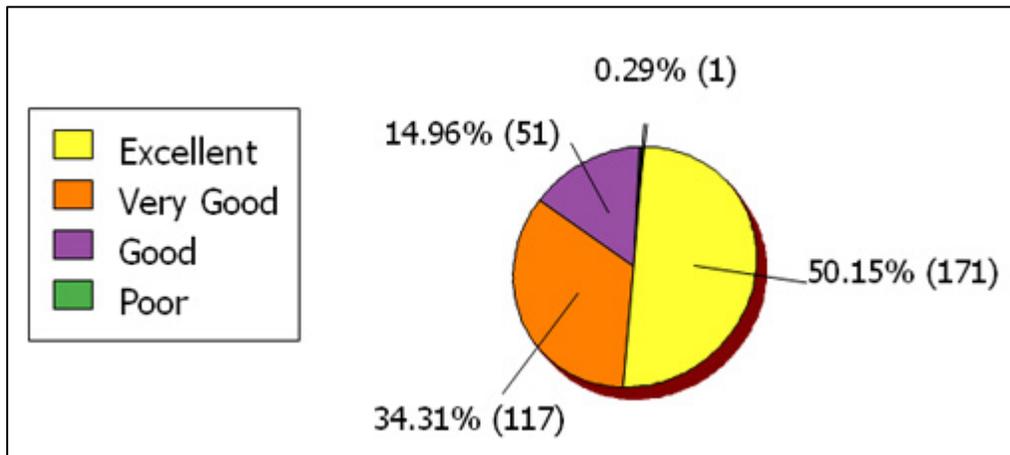
Question 7: I plan to undertake a comprehensive energy improvement project that includes air sealing and insulation:



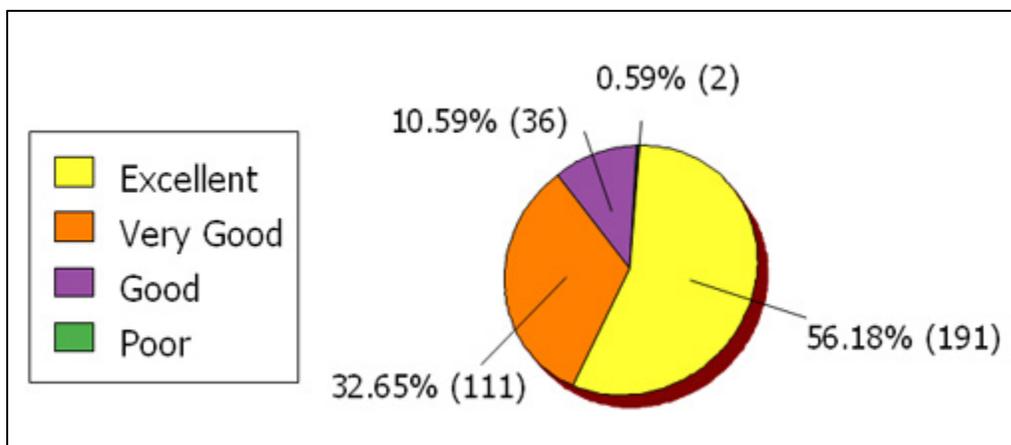
Question 8: I plan to investigate financing options for energy improvement projects:



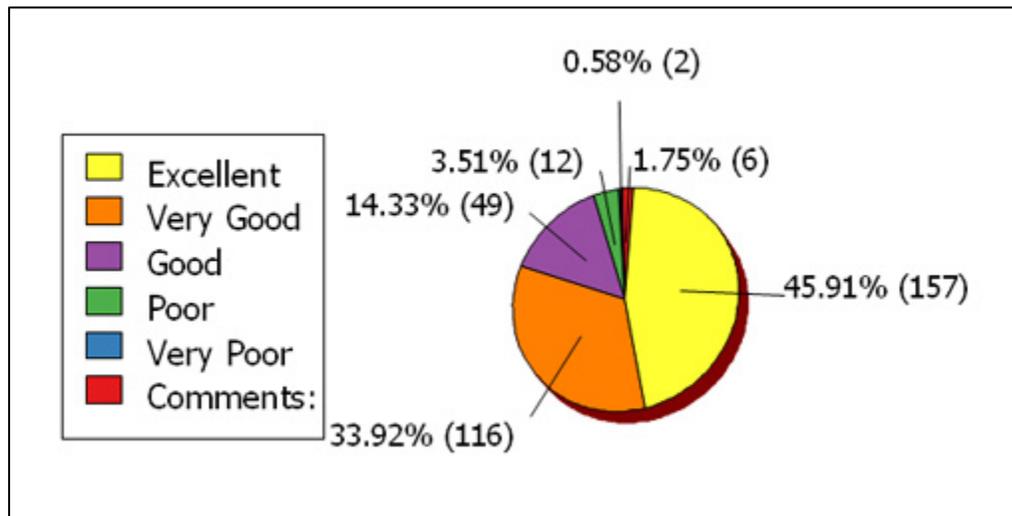
Question 9: Did the workshop meet your expectations?



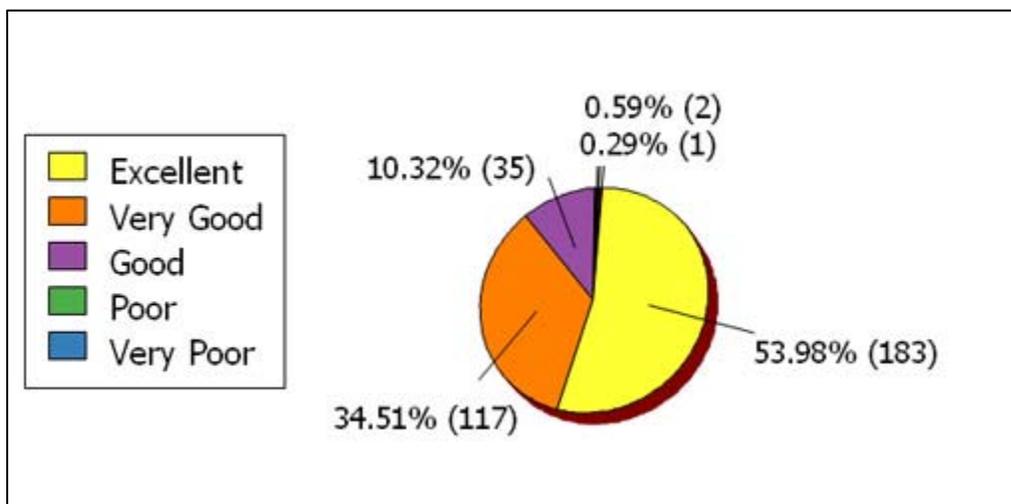
Question 10: How would you rate the overall performance of the workshop presenter?



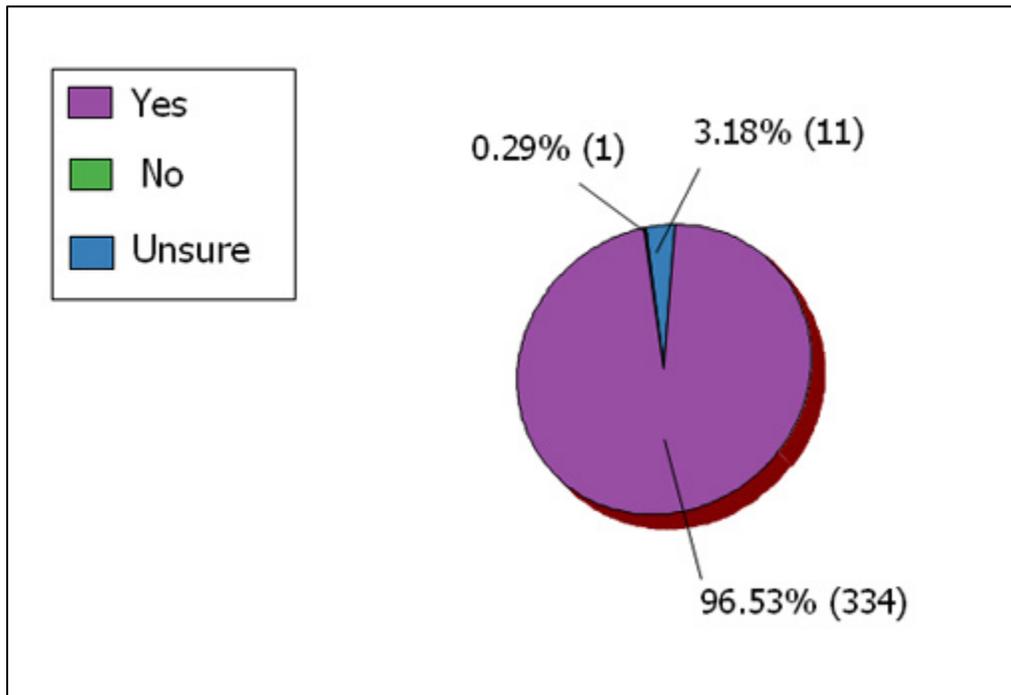
Question 11: Was the length of the workshop suitable for the material covered?



Question 12: Overall, how would you rate the Button Up workshop?



Question 13: Would you recommend a Button Up workshop to your friends/neighbors/family?



PAREI Energy Advisor Program Assessment

Although this program required a large amount of one on one contact with homeowners the outcomes have proven to be valuable. While we do not yet know what the total count will be of completed energy audits and actual tasks performed, as many of these tasks will take place over the next six months, we do know that the Energy Advisors witnessed a very positive reaction and enthusiasm from the homeowners and their desires to see the projects through. What we were hoping the Advisors would do is to befriend the homeowner and engage with them on a personal level. Not as a sales person, but as a neighbor and friend. Our Advisors ranged from certified auditors to simple volunteers that wanted to make a difference. We had Advisors that had weatherized their homes and were able to help homeowners better understand how the information they learned at the Button Up Presentations related to their own homes. By looking at some of the reports (Attachment A) you will see that the Advisors were able to dig deep in to the issues of each home and come up with some intelligent observations, tangible tips, and resource referrals. Through friendly dialogue the Advisors were able to move the homeowner in a positive direction.

Some of the homeowners were able to start doing tasks right away, others are seeking professional assistance and most are considering an audit in the near future before they go any further. The initial forms the homeowners filled out had questions about their overall knowledge of energy issues as

well as the condition of their house. This is to be matched with the observations and discoveries of the Energy Advisor as well as the follow-up that is planned for this summer. We are eager to see if there was systemic change in the actions and behaviors through these three different points in time. We believe that with a little hand holding the homeowner can be empowered to go well beyond classroom learning.

What follows is a list of observations gathered from the advisors and from the coordinators of the program:

1. Once promoted in the proper way, one to one, homeowners were very eager for the program.
2. Homeowners were usually ready with concerns and corresponding information (bills, energy usage) when the advisor arrived.
3. Pertaining to #2 above, many of the items the homeowners were concerned about (such as window replacement) were not high on the advisor's priority list of tasks to perform. For instance, a homeowner might want to add insulation to a wall when the real challenge was air infiltration. Thus, it was the auditor's role to assess the needs and help the homeowner prioritize the weatherization tasks.
4. There was a real desire by the advisors to see the project through, but they could neither do the work themselves, nor spend a large amount of time waiting for the homeowner to move.
5. Scheduling was an issue. Advisors and homeowners all have busy schedules and it was sometimes difficult to arrange a time to meet. Some of the arranged visits still have not taken place due to vacations and other timing issues.

Obstacles

Overall the program went rather smoothly. There were, however, challenges that need to be addressed to be taken into future consideration:

1. Program timing – The development of the Energy Advisor program had to happen within weeks because the Button Up Presentations announced the program's existence five weeks into grant funds being announced! After contracting there was not enough time for program development, thorough recruiting and training. Once the program got caught up everything went rather smoothly. Indeed, we are still receiving requests for new energy advisors to this day. So we are eager to keep this program funded!
2. Presenter training – There was either confusion or lack of knowledge amongst the presenters about the details that pertain to the Energy Advisor program. Once we did outreach to the presenters or send an EA representative to the Button-Up presentations we were able to alleviate this issue. This factor also added to the slow start to the program that has led us to need more time to complete the EA visits.
3. We trained each Advisor individually over the phone and in person. If we were to do this program again we would develop a formal training program that we would do as a group. We did not have the overall continuity that we wanted with each of the Advisors.
4. We need to set better boundaries as to what the Advisor/Homeowner relationship is. Some Advisors liked the idea that the relationship was anything they wanted it to be, but others

wanted limits. In the end all of the relationships worked out great, there was just worry that without limits the homeowner could have taken advantage of the Advisor.

The Future

Information

Through the reporting from the Advisors, we have received a large amount of information that will be analyzed in the next month. This information will be valuable in assessing if the program was valuable and where changes need to be made. Hopefully, it will tell us what the homeowners' largest challenges were and how much one-on-one mentoring was needed in order for homeowners to act on home weatherization goals.

Follow-up

We are planning a follow-up by phone and e-mail to the homeowners in the program to get their impressions on value and to see if they completed or intend to complete weatherization tasks (DIY or professional).

Conclusion

For years PAREI has been trying one-on-one programs that match people with skills with people that needed a little knowledge and assistance to get them on their way to act on weatherization tasks. We were sure that we would be able to get 15 families that would allow us to come into their homes to help them. But we didn't know a number of things, for instance:

1. What was their level of knowledge?
2. How willing would they be to spend money to save energy?
3. What were the road blocks in place that stopped homeowners from making moves?
4. How much could one-on-one hand holding help the homeowner?

Conducting Energy Advisor home visits throughout the state has given us much more knowledge about why homeowners do not act on energy efficiency immediately. Every visit revealed the benefits of one-on-one advising. A major obstacle for homeowners is the inability to apply general energy saving/efficiency tips to their own home. Often, homeowners get overwhelmed and do not know where to start. The combination of Button Up workshops and home visits is a winning combination. The one-on-one setting leaves the homeowner with the confidence to proceed with projects. In the end, they are better able to speak the energy efficiency language and have a better Energy IQ. The program also left the Energy Advisors with valuable insights into human behavior concerning making changes to their homes. The information will help set the course for the approach taken in future Energy Advisor visits.

Button Up Energy Efficiency and Weatherization Video Series

Our grant provided funding to develop a BUNH video series that could be cablecast on local cable access channels and through video sharing websites such as YouTube. We selected EVP Inc. of Waterville Valley, NH to produce a series of 1-2 minute short videos demonstrating energy efficiency, insulation, and air sealing techniques, as well as other home energy improvement measures highlighted in the workshops. Fifteen videos have now been uploaded to YouTube and are available through the My Energy Plan website (<http://myenergyplan.net/videos/index.jsp>). We will advertise the availability of this series to past Button Up attendees and will provide New Hampshire Coalition for Community Media with a DVD of the series for distribution to cable access channels throughout the state this fall. A description of each of the video is provided in Attachment B.

Summary of Findings of Button Up 2012 Follow-up Study

In April 2012, our communications consultant firm, Jackson, Jackson, and Wagner, conducted telephone interviews with past Button Up attendees. The purpose of this survey was to better understand what actions may have been implemented as a result of attending the Button Up workshop. At least two weeks, and in some cases several weeks, had elapsed since the workshop. Thirty respondents were interviewed by phone between April 1 and April 25. One to two respondents were randomly selected from each of the workshop sign-in lists. Everyone who was contacted was happy to participate and most said they would welcome a follow-up call at a later point in time.

Awareness

Top-of-head recall of what attendees learned primarily focused around insulation information, appliance energy usage, and energy leakage/airflow in the home, foundation and light bulbs.

Behaviors

- **50% (15) of the respondents said they have taken some sort of action** to reduce energy consumption in the home since the workshop. Purchasing an energy efficient appliance and turning down the thermostat were the primary actions, but other mentions include:

| | | |
|-------|---|---|
| 13.2% | 5 | Purchased an energy efficient appliance |
| 13.2% | 5 | Turned down thermostat |
| 7.9% | 3 | Fixed leaky windows, doors |
| 7.9% | 3 | Installed compact fluorescent light bulbs |
| 5.3% | 2 | Air sealing in attic, basement |
| 5.3% | 2 | Installed "smart power strips" |

| | | |
|-------|----|--|
| 5.3% | 2 | Scheduled, had energy audit |
| 5.3% | 2 | Unplugged electronics that use electricity |
| 36.8% | 14 | Other |

Other:

- Already used fluorescent bulbs (0000000454 Anonymous)
- Blower door test; weatherization project, put in a solar system pd system (0000000108 Anonymous)
- Dry clothes in basement; compost citrus products along with others (0000000286 Anonymous)
- Frig and dehumidifier (0000000122 Anonymous)
- Hand-washing dishes (0000000291 Anonymous)
- Light bulb replaced, hotel green energy signed up (0000000188 Anonymous)
- Met with contractors on heating system (0000000175 Anonymous)
- Open windows to get air flow in house (0000000328 Anonymous)
- Plastic on windows, sealed door better (0000000106 Anonymous)
- Power-strips for new TV (0000000455 Anonymous)
- Turning off lights (0000000290 Anonymous)
- Use appliances at "off" times (0000000292 Anonymous)
- Visit from guy from workshop (0000000296 Anonymous)
- Won the "kilowatt" door prize, though we have not checked everything yet (0000000294 Anonymous)

- **63% (22) plan to take further action in the next 6 to 18 months.** Those who are not, cite financial concerns/concerns about “return on investment” and the need to do further research. Typical projects they are considering include having an energy audit, installing programmable thermostats, purchasing an energy efficient appliance, air sealing an attic or basement and installing insulation. A few are considering solar options, building green and pellet options. Cost concerns are a barrier on the major of upgrades.

Handouts and Resources

- Most (83%) remember getting the handout with resource contacts and still have it in their possession (although most would have to look for it). The majority (72%) said they looked it over but 59% said they have not visited any of the links provided. Those who have contacted someone specifically for what they needed (“blower guy”, “energy audit”, “NH Saves for light bulbs”) but most are just hanging on to it until they decide to do something.
- Slightly more than half, 61%, have not been to the My Energy Plan website or used the on-line tools. But almost 30% have. The Personal Energy Planner was the tool most accessed and then the Energy Project Connector.

- Many (72%) remember hearing about UNH's Cooperative Extension Energy Answers program. Two-thirds of those who remember it remember hearing about its hotline and phone number (64%).
- Only half (50%) remember hearing about PAREI's Energy Advisor program and of those, only 53% (9) remember hearing about the ability to get personalized assistance from an Energy Advisor.

Effectiveness Overall

94% rate the workshop, in retrospect, as highly effective (47% excellent, 47% good). No one rated it "poor". The presenter was instrumental for how well they liked the workshop. The more targeted the presenter was to their issues, the better they liked it. Some expected a higher level of detail or subject matter more tuned to what they were interested in.

Sample verbatim include:

- Between good and excellent...second session a little problematic, the presenters were new...way too long, it lasted 3 hours, way too much material (0000000095 Anonymous)
- Not that useful because had already done stuff; was interesting to see effects of more insulation; expected something that didn't think about before -- had already done it in other houses (0000000242 Anonymous)
- One thing little disappointing was that the leader went over things that may not have been necessary if they first asked people to tell him what they knew, he could have skipped some stuff and spend more time more unique or timely really timely materials (0000000188 Anonymous)
- Presenter great; don't remember a lot of details. Good engagement, passed things around, asked people a lot of questions (0000000328 Anonymous)
- Very good because it I wanted to do something, but didn't know what direction to head in, what to do, what to look at. (0000000086 Anonymous)

90% would recommend the workshop to family or friends to attend. And 80% are "very likely" to attend another Button Up workshop on a more advanced topic.

Recommendations for the Button Up Program

Overview

BUNH started in 2009 as a strategy to drive people to learn about and use New England Carbon Challenge's tools and resources (now My Energy Plan). However, BUNH has made considerable progress in "knitting" together diverse constituents and groups not necessarily engaged on energy issues (e.g., energy contractors, service providers to low income families, and others). Furthermore, BUNH has proved successful enough to conclude its third season as a stand-alone project. The intention of the most recent BUNH project was to motivate "homeowners interested in reducing their home energy use to take, as well as maintain, concrete and measurable actions to reduce their household energy consumption and thus greenhouse gas emissions".

After the second season of Button Up workshops, attendees from both seasons were asked what energy-saving improvements they had made to their home since attending a Button Up NH workshop. 48 of 50 respondents indicated improvements had been made; the most popular actions taken were installing compact fluorescent light bulbs and fixing leaky windows and doors. In 2012, 72 percent said reviewed the handout they received at a 2012 workshop, but only 18 percent said they had subsequently visited any of the links provided on the document. Almost two-thirds admitted they had not visited the My Energy Plan web site and used any of the on-line tools that are available to assist them in reducing energy consumption. *The falloff in desired behavior after any workshop is predictable and is certainly not limited to the topic or this project.*

In light of the evaluation and performance data collected from Button Up over the last three years, we would recommend the following:

1. BUNH should continue provided that we begin to see impacts beyond promises in the workshop evaluations.

- Provided we can see evidence of: changing behaviors, households spending money on solutions based upon what they learned, smaller energy bills, and "pick-up" by homeowners who may not have attended a workshop, but who have been influenced by neighbors who did.
- The BUNH tools are tested and presenters are practiced knowledgeable and enthusiastic. The costs are modest: roughly \$61.00 in BUNH personnel costs per attendee.
- Lessons the team has learned are specific, and when addressed will serve to strengthen a good program that exemplifies the great interest and dedication of a growing number of people in advancing state energy security through actions at the local level.

2. The VEIC report states "there is ongoing uncertainty in New Hampshire among some policy leaders about the appropriate role of government" in advancing energy efficiency and sustainable

energy development and use. **For this reason, integration of policy leaders into the program would strengthen each workshop's impact.**

- In the face of the energy challenges in New Hampshire, Button Up is worthwhile for a few, but can be made worthwhile and impactful for many, if policy makers and policy direction are woven into the program. Significantly, Executive Councilor Ray Burton agreed to host and promote the first 2012 workshop. In the future, every state senator should promote one workshop in his or her district; arranging 24 regional workshops is more cost effective. Organizing workshops with the cooperation, endorsement, and participation of elected officials is not political in the least, but the convening of lawmakers with their constituents adds a valuable layer of education and understanding.

3. **In the future, workshops should start sooner, as each BUNH season was hampered by limited promotion within a limited window of time**

- The time to prepare and implement Button-Up NH 2012-2013 is now: "... start it earlier...late summer/early fall." Don't rely on volunteers for the professional marketing and promotion which can benefit BUNH. More penetration is essential: trade (home and construction) magazines have the editorial calendars filling up. Cooperative direct mail such as ValPak offers cost effective yet high penetration. One participant said "... NHPR has very palatable advert prices. repeated messages for the Button Up partners sponsoring these "ongoing workshops in your community" may get to the ears of possible attendees.".

4. **BUNH can't be a stand-alone project or program, but should be coupled with other programs**

- Whether led by an entity in state government, UNH, Cooperative Extension, or by a non-profit, BUNH should be housed "within a room in a larger home" so that it one of several related programs at the same table and serving the energy security and efficiency needs of the state and its citizens.

Attachment A: Energy Advisors Program



Plan For Your Energy Future

Energy Advisors

Specific work performed

Created outline and working parameters

We started by creating a program guideline that lays out the reasons for taking the Energy Advisor process on, setting the operational rules and creating a way to appraise the effectiveness of the program. The outline set the goals for the Advisors and gives them guidelines concerning their partnership with the homeowner. This is still a work in progress as the first year of Advisor visits are, and will, help us mold and complete this document.

Created slides for Button Up presentations

We created and inserted onto the Button Up PowerPoint presentation slides that define the Energy Advisor Program and encourage the participant to take advantage of the opportunity. Each Button Up presentation is marketing the program to participants and directing them to the sign-up process. Note: Until now sign-up sheets have been available at the Button Up presentations, but not necessarily handed out to the participants. We might want to start handing them out to make sure all participants leave with them in their hands.

Created links on PAREI site to Button UP, created and posted EA program sign-up sheet

Created a sign-up sheet and posted the sheet to the PAREI website. Created a link and page on the PAREI site that describes the program and directs participants to the sign up sheet.

<http://www.plymouthenergy.org/> (Energy Advisors link)

<http://www.plymouthenergy.org/ae.html> (EA Page)

http://www.plymouthenergy.org/advisor_form.pdf (EA Form)

Created a template for Advisor reporting. All Advisors needed to submit this form after meeting and interacting with their homeowners.

http://www.plymouthenergy.org/Advisor_feedback_report.pdf (Advisor report form)

Wrote follow-up e-mail letter (attachment 1)

The follow up letter was sent directly from PAREI to over 100 Button Up participants from Durham area, Haverhill area and Sandwich area. After the first round of follow up letters, the partners decided it was best to send a combined follow up letter from UNH that addressed both the Energy Advisors Program and Energy Answers. We assisted with preparing this letter.

Created Database of Advisors, homeowners and Button Up Participants

Created a database of Energy Advisors and homeowners that signed up for the program. PAREI partnered with UNH to track and input participant information on sign-in sheets from all Button Up Presentation sites. They were inputting on to an Excel spreadsheet at the direction of UNH.

Recruited eight advisors in Plymouth, Keene, Sandwich, Temple, Wolfeboro, Durham, Nashua and Haverhill

Received 22 requests from homeowners (7 more than contracted for)

Requests came from:

Amherst
Andover
Ctr. Tuftonboro (2)
Durham (4)
Hancock
Keene
Milford
Nashua
New Boston
Orford
Peterborough (2)
Tamworth
Temple
Wilton
Wolfeboro (2)

Conducted 14 Homeowner Visits and received 9 Advisor reports.

Of the remaining eight homeowner visits all but two have been assigned to an advisor and all have been contacted. Visits will continue to be scheduled and conducted through June. Completed Energy Advisor Feedback reports are addendums to this report. Other reports will be forwarded as they become available.

DATE of first meeting: 4/6/12

Advisor's Name: Bev Edwards

Homeowner's Name: [deleted]

Address: [deleted]

City: Wilton State: NH Zip Code: 03086

How much time did you spend at the home? 1 1/2 hrs

How far did you travel to get to the home? 13 miles - 1/2 hr

Homeowner concerns discussed in interview?

Specific concerns -Drafts family felt in several spots. Hdown they could best address air infiltrations and heat losses, particularly around two exterior entry doors and several windows.

General concern about how to make home more energy efficient.

Concerns discovered in the home inspection?

Zero insulation at the top and bottom of the envelope! Cathedral ceiling-beautiful exposed beams. But no insulation under roof or at ceiling. Need for basement air sealing and insulation. Only scant, broken insulating material along exterior wall boards where they meet cement foundation in basement (12"x10" sections)- need for insulation along walls and for basement ceiling.

Light visible through sides of two exterior doors. Need possible repair & good weather stripping.

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments:

Need for more light changes to CFLs or LEDs. Need for exterior wall outlet pads/gaskets. Need to address ghost elec waste- computer "sleep" settings, etc and to learn to turn off power cords at night, etc.

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

Yes, except that a professional energy audit w/blower door test, thermography, etc is needed to determine exactly where and how to best help tighten his home.

What recommendations were made to the homeowner?

Recommended keeping their good wood stove for heat and adding solar hot water, in part due to age & condition of oil burner. Recommended new fridge - they have old, inefficient one. Recommended good weather stripping around leaky doors and caulking around leaky window frames - lent him a copy of Stay Warm NH training video to watch window caulking and weather stripping training. Gave him link to HEET MA. org for watching DVD section on weather stripping, etc. Recommended PSNH Home Per. w/Energy Star program.

How did the relationship evolve after the first meeting? Have more meetings been scheduled? Have there been any emails or phone calls?

We established a good relationship during the home visit. There have been two email exchanges since the visit. He has talked to PSNH and is eligible for HP w Energy Star program and has sent in an application. I will be making sure he gets a good auditor and good work done - phoned PSNH program director. And I'll be following through to make sure he gets the help he needs. After retrofitting work gets done and paid for, he expressed interested in MERI's solar hot water program. He also expressed a lot of gratitude for the advice and my follow-through with him. Nice guy and family!

Of the recommendations given, how many and which ones did the homeowner follow up on?

So far, he is putting effort into behavioral steps we discussed, is planning to do the window caulking and door weather stripping if PSNH can't help with that. He has pursued PSNH program, and has dropped the idea that he needed to buy new windows. I suggested caulking around frames first and getting the advice of a professional auditor before making that kind of investment.

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

His pursuit of PSNH program and statements of behavioral commitments and willingness to follow other recommendations.

Did you, as the advisor, learn anything new in the process? Yes No

How earnest some folks are about becoming more energy efficient, but their confusion about prioritizing which steps will reap the most benefit and actually be doable for them. Their concern about having the right skills.

Additional comments:

The other things I learned were: 1) I wish I were a profess. energy auditor and could've answered his questions with more confidence, then and there. 2) I really enjoyed being able to help as much as I was able to. 3) I was surprised by how much I actually had absorbed after being present at the 2 Button Up 101 and one 201 workshop I'd coordinated (two in Temple and one in Milford) and based on everything I've learned since I accompanied Margaret Dillon (energy auditor) during the original audits for Temple's municipal buildings, was present for the planning & retrofitting process after we got our RGGI grant, watched the workers air sealing (till the cows came home!), was present for the blower door tests throughout the retrofit and at the final tests, and did winterizing for Temple homes through our Energy Committee's Free Weatherization Program for folks who qualify for fuel assistance.

Bottom line: I had hoped I'd have some help to offer when I went to this house. When I left, I was both surprised by what I was able to offer and wished I knew a lot MORE.

DATE of first meeting: 4/10/12

Advisor's Name: Peter Adams

Homeowner's Name: [deleted]

Address: [deleted]

City: Tuftenboro State: NH Zip Code: _____

How much time did you spend at the home? 2.5 hours

How far did you travel to get to the home? 40 miles

Homeowner concerns discussed in interview?

They have a very large farmhouse with a lot of different sections built in the 1820s, 1860s and 1985. The newer section (apartment) seems to be tight, but has moisture problems. The older sections are very drafty and have air and insulation issues.

Concerns discovered in the home inspection?

No insulation on basement ceiling, low quality bat insulation in the attic, broken and cracked windows, no weather stripping on some doors. Interior doors used on exterior (breezeway) surfaces with no weather stripping. Little insulation on pipes for boiler.

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments: _____

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

List of contractors in the area and auditors. Will get back to them.

What recommendations were made to the homeowner?

Insulate pipes, fix windows, get an audit. Look at attic and air sealing in basement ceiling as well as insulation soon. They are reluctant to add insulation to walls, although I said they would have a better feel for that once they got an audit.

How did the relationship evolve after the first meeting? Have more meetings been scheduled? Have there been any emails or phone calls?

Need to follow up on contractors and auditors. I will be back to them via e-mail and phone

Of the recommendations given, how many and which ones did the homeowner follow up on?

I believe they will move on all recommendations. As the price of oil has risen, they have turned down the heat. (Another that does not qualify for Home Performance due to freezing themselves)> They were looking to try and doing some solar for about \$12K, but are now thinking of putting that into weatherization tasks.

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

Did you, as the advisor, learn anything new in the process? Yes No

Additional comments:

This is the typical two people living in a rambling farm house that they retired to 25 years ago. The layout is such that they can't cut off large portions of the home, so they are having to heat the whole space. They have done a lot already. Foam insulation in holes in the foundation ++. But not the big stuff. They have gone from 1500 gallons to around 1000 due the price, but are quite cold in the winter. They are doing this to be warmer first save more money second.

DATE of first meeting: 4/11/12

Advisor's Name: Bev Edwards

Homeowner's Name: [deleted]

Address: [deleted]

City: Hancock State: NH Zip Code: 03458

How much time did you spend at the home? 1 1/2 hrs

How far did you travel to get to the home? 15 miles, 1/2 hr drive

Homeowner concerns discussed in interview?

Should he replace his windows?

Need to upgrade his forced hot air oil burner?

How can his home be more energy efficient ?

Concerns discovered in the home inspection?

There is a need for air sealing and insulation in the basement.

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments:

Most lights already changed to CFLs & LEDs. They recycle. They compost and have a large organic garden. I recommended use of computer "sleep" settings, cold water laundry, line drying..

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

They need thermographic photos and blower door test to determine where air sealing and insulation will be most effective and important.

What recommendations were made to the homeowner?

Priority - First, since they can afford it, I recommended that they obtain a professional energy audit to determine where air sealing and insulation would be most effective and what the best replacement would be for their oil burner

I recommended NOT replacing their windows, but air sealing around the frames

I recommended air sealing and insulation where wood outer walls meet the cement walls in basement, and insulating the basement ceiling

How did the relationship evolve after the first meeting? Have more meetings been scheduled? Have there been any emails or phone calls?

IT was a comfortable meeting, followed by several emails from me to Ed. I checked with Margaret Dillon to see if she had time take requests for home performance assessments (her preferred words). Then I emailed Ed to let him know that she is available. He knew her from her work on his church and she was his preferred energy auditor-- smart guy!

Of the recommendations given, how many and which ones did the homeowner follow up on?

He will be going on a waiting list for an energy audit. He will not be replacing his windows, but getting air sealing and weather stripping done where it's needed.

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

Not that he has shared with me, other than his sincere intentions.

Did you, as the advisor, learn anything new in the process? Yes No

I was impressed with the amount of interest in efficient energy usage this older couple has.

Additional comments:

I assume that they will get a great energy audit from Margaret Dillon. It would surprise me if they don't follow through with her advice. But I will maintain enough contact with to see them through their efforts.

Advisor Feedback Form (Text)

1. Date of first meeting? **Feb 29, 2012** Who with? [deleted] How much time was spent? **2 hours**
2. How far did you travel to get to the home? **32 miles round trip**
3. Concerns discussed in interview with homeowner? **Leaky wilndows, poor insulation (2x4 1053 construction), crawl space moisture, attic insulation inadequate**
4. Concerns discovered in the home inspection? **All of the above were obvious and already know to the home owner.**
5. Did you talk with the homeowner about lifestyle issues? If so was the homeowner receptive to that line of questions? **They live there year round and try to heat with wood most of the time. They do have a propane fired forced air heating system. We brushed up against income assistance and income limits for energy efficiency programs. I gave him some web links to research so he could determine his own eligibility.**
6. Did you have enough materials and knowledge to answer the homeowner's questions? **Mostly yes however they need some specific recommendation on crawly space moisture sealing. They also need some knowledge on what types of insulation materials are best for them. If not, what was missing? (ie: List of contractors, products, resources)**
7. Recommendations made to the homeowner? **Determine their HHI, Hire an energy auditor including a blower door analysis, Install Doug Campbell type window inserts**
8. How did the relationship evolve after the first meeting? **I think there will only be this one meeting. I promised to supply names of crawl space contractors and energy auditors. More meetings? E-mails/phone calls?**
9. Of the recommendations given, how many and which ones did the homeowner follow up on? **We don't have a specific follow-up plan in place.**
10. Comments on the relationship. **It was a good follow up after our Button Up workshop in Sandwich which he attended. I'm not sure either of us knew what was expected. Would you do it again? Yes since I seem to be doing it all the time in one form or another anyway. Were there tangible movements toward efficiency made? It is too soon to answer that question. Again we may need a more formal follow up system.**
11. Did you, as the advisor, learn anything new in the process? **Not yet, but I will as I get some names to send to the home owner.**

Energy Advisor: Zak Brohinsky

1. Date of first meeting? Feb 30, 2012 Who with? [deleted], Haverhill
How much time was spent? 1 _ hours Type of house? Manufactured home
2. How far did you travel to get to the home? 66 miles round trip
3. Concerns discussed in interview with homeowner? Leaky windows, some mold in bathrooms, duct work & belly including insulation – she was not sure but thought the belly holding the insulation below had ripped, insulating roof/walls, appliances...I did not get the sense that she knew the extent of these issues but was aware of some.
4. Concerns discovered in the home inspection? Leaky windows, mold in bathrooms from showerhead/spout/hot-cold knobs not supported & no vents in bathrooms/laundry room – serious moisture issues, hole in 2nd bathtub – major issues in bathroom, ducts seemed to be working considering she did not identify hot/cold areas in house (even room farthest from furnace was warm)
5. Did you talk with the homeowner about lifestyle issues? If so was the homeowner receptive to that line of questions? Talked about lifestyle issues and was receptive. She already turns heat down during day while she is out and a bit while she sleeps at night. She applied for Tri-County CAP Weatherization and Fuel Assistance programs in 2009 but never heard anything. I will follow up on this. Gave her list of resources to explore – specifically HPwES – asked her to begin getting 1-2 years of fuel usage in preparation for HPwES application, if needed.
6. Did you have enough materials and knowledge to answer the homeowner's questions? Mostly due to course I took on Manufactured Home Weatherization. However, specifics regarding furnace I was unsure of.
7. Recommendations made to the homeowner? 1. I will work on following up with Tri-County CAP Weatherization Program...2. She will work on getting 1-2 years of fuel usage...3. When CAP has been exhausted we will look into HPwES and will together to fill out application, etc...4. Begin talking about Energy Audit – this is sort of a “must do” and will provide her with list of priorities.
8. How did the relationship evolve after the first meeting? This was the first meeting but get the sense we will work well together. Before I left I/PAREI gave her a number of low hanging fruit that we could install together – low flow showerhead, sink aerators, plastic window coverings, kill-o-watt meter. Am planning on heading back on Tuesday, March 6th to help with these and continue the larger conversation.
9. Of the recommendations given, how many and which ones did the homeowner follow up on? We will see...
10. Comments on the relationship. Positive – she is eager to **do** something. After I

gave her the small things (showerhead, etc) and told her I would follow up with CAP Program and for her to get fuel usage, she quickly wanted to set up another time for me to come over...Tuesday, March 6th...if she is eager, I am eager to help! I got the sense she is just looking for some direction.

Would you do it again? Yes

Were there tangible movements toward efficiency made? A bit soon but feel comfortable that something will happen.

11. Did you, as the advisor, learn anything new in the process? I'll have to think about that one...

DATE of first meeting: April 18, 2012

Advisor's Name: Peter Adams

Homeowner's Name: [deleted]

Address: [deleted]

City: Peterborough State: _____ Zip Code: NH

How much time did you spend at the home? 2.0 hours

How far did you travel to get to the home? 98 miles

Homeowner concerns discussed in interview?

Homeowner is overwhelmed with the outlay of money to keep the house warm. They have been turning down the thermostat as the price of oil has been rising and buying oil on the spot market as they can't afford to be topped off. They used 1500+ gallons this past winter.

Concerns discovered in the home inspection?

The house was a 3 season vacation home that was converted into a 4 season. Two sections of the house lay outside the original floor plan and are over crawl space with no insulation under floor. Both sections are very hard to heat. Main building basement and attic have some, but very little insulation. Windows are large and consistent with a summer home with a view. We spoke about energy audit and the envelop of the house as well as Solar thermal.

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments:

Very although he has 2 small children that make turning things off or down more difficult.

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

What recommendations were made to the homeowner?

He is going to look into PSNH HPES and contact an auditor for the fall once the temp starts to drop. He is going to contract with an insulation company soon to insulate below the two outlying sections and look to have storm windows made for the leaky windows. He is going to hold off on insulating the attic and walls until he gets the audit. Sent him links to Apricus solar, sites on LED lighting as well as videos on attic insulation and dense pack insulation. He is going to get involved with Monadnock REI organization.

How did the relationship evolve after the first meeting? Have more meetings been scheduled?
Have there been any emails or phone calls?

Too soon to tell

Of the recommendations given, how many and which ones did the homeowner follow up on?

See above about what he will be doing. Will check with him mid summer

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

Did you, as the advisor, learn anything new in the process? Yes No

Additional comments:

He seemed quite confused about how to translate the information he learned at the BU into his own home. Also, there was a bit of discussion about what would come first and had the most bang for the buck. We surprised when the priorities were adjusted.

DATE of first meeting: 4/27/12

Advisor's Name: Bev Edwards

Homeowner's Name: [deleted]

Address: [deleted]

City: Milford State: NH Zip Code: 03055

How much time did you spend at the home? 1 hour 40 minutes

How far did you travel to get to the home? 17 miles 1/2 hr drive

Homeowner concerns discussed in interview?

Wanted to know of any suggestions for more energy efficiency

Concerns discovered in the home inspection?

Moisture problem from cold, wet crawl space under main part of the house

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments:

They have already changed lights to CFLs, installed good programable thermostat, keep temp low in house, recycle, use computer sleep settings, etc.

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

What recommendations were made to the homeowner?

1) Apply for PSNH Home Performance w/Energy Star program. 2) Get an energy audit. 3) Have Stego Wrap installed in crawl space, followed by spray foam sealing. 4) Install a wood stove in FP.

How did the relationship evolve after the first meeting? Have more meetings been scheduled? Have there been any emails or phone calls?

There were several emails before the home visit and one email following the visit. No further visits have been scheduled.

Of the recommendations given, how many and which ones did the homeowner follow up on?

I'm confident that they will apply to PSNH. And I'm equally confident that they will hire help to do the moisture mitigation work that is needed for their crawl space - Stego Wrap and spray foam sealing.

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

Not enough time for that. But I will follow through with more contacts to see them through this.

Did you, as the advisor, learn anything new in the process? Yes No

I learned that people with a sincere interest in energy efficiency and the environment, still chose to recently install a new oil burner. Sad.

Additional comments:

I checked out their crawl space and found it very workable. 4 ft high and expansive. Eventually, they will want to remove the 6 inches of insulation in their attic and replace with 15 + inches of loose fill cellulose. But they close off two upper floors of their home, now that kids have left. So, those 2 levels of rooms all provide an insulating function, below the attic.

DATE of first meeting: April 5, 2012

Advisor's Name: Steve Weglarz

Homeowner's Name: [deleted]

Address: [deleted]

City: Durham State: NH Zip Code: 03824

How much time did you spend at the home? 3.5 hrs

How far did you travel to get to the home? 2 miles

Homeowner concerns discussed in interview?

warm basement/garage, older (1963) windows & doors, many drafts, attic insulation?

Overtime teenager showers.

Concerns discovered in the home inspection?

12' of fin tube in garage (explains the warmth) on same heating loop as bedroom zone, no insulation on copper FHW pipes in basement/garage, many sources of air infiltration in basement, oversized fireplace (double flue) drawing air from conditioned space on first floor and basement. Attic insulation incomplete,

Did you talk to the homeowner about lifestyle issues? Yes No

If yes, was the homeowner receptive to that line of questions? Yes No Comments:

Did you have enough materials and knowledge to answer the homeowner's questions? Yes No

If not, what was missing?

What recommendations were made to the homeowner?

Insulate FHW and other pipes in basement, insulate and air seal basement envelope penetrations, upgrade/weatherstrip basement doors and windows, reduce domestic water heater temp, remove or bypass garage heat loop, use interior storm windows on first floor (winter), air seal attic bypasses, top

How did the relationship evolve after the first meeting? Have more meetings been scheduled?
Have there been any emails or phone calls?

Homeowners are interested in the "Housewarming" and HPwES program.

I will follow up regularly to encourage action. We know this family personally and I would like them to
become a model for the community.

Of the recommendations given, how many and which ones did the homeowner follow up on?
none yet, too early. Just visited 2 days ago.

Comments of the relationship: Would you do it again? Yes No

Were there tangible movements toward efficiency made? Yes No

Did you, as the advisor, learn anything new in the process? Yes No

Some folks know very little about how their house operates!

Additional comments:

Dad was very excited when I showed him how to shut off HW supply to showering teenager.

They are also interested in solar thermal so I've sent web links to SEAREI, PAREI and Revision Energy
websites.

Attachment B: The BUNH Energy Efficiency and Weatherization Video Series

Website: <http://myenergyplan.net/videos>

MyEnergyPlan™



Energy Efficiency and Weatherization Video Series



NH Homes Use a Lot of Energy

Our first video segment looks at how NH homes typically use energy. Knowing what power is being used in your home and knowing when to turn devices off will add to your energy savings.



Your Home and How You Light It

Did you know the average home has 20 to 30 light bulbs? Lots of lighting choices means lots of ways to save.



Understanding Hot Water

Heating hot water accounts for about 16% of a home's energy demand. Learn to tame this large user of energy in your home.



Your Energy IQ

To maximize your energy savings, you first need to know how much you are spending on the fuels you use in your home. In this video you'll learn how to gather the data that will tell you if your home is using more energy than it should and how to track your progress in reducing your energy consumption.

Energy and Your Appliances

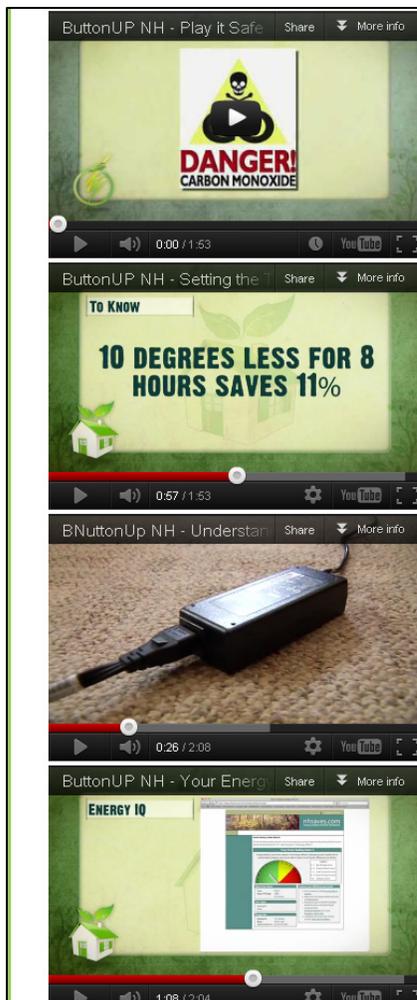
What does the ENERGY STAR label mean and how the ENERGY GUIDE on an appliance can help you estimate your savings.

Doing the Laundry

Ideas for reducing the energy usage and costs of doing the laundry.

Keep Your Heating System Clean

You can reap big savings by keeping your heating system in peak condition.



Play It Safe

Home heating systems such as boilers and furnaces use an open flame and thus have safety considerations you should be aware of. Understanding combustion issues, moisture issues, and the need for adequate ventilation will help you play it safe.

Setting Your Thermostat

In this video you'll learn how a few small changes to your thermostat setting can yield big savings on your heating bills.

Understanding Vampire Loads

Many devices in your home likely continue to draw electricity even when they are "off". The typical home has 40 such devices that continually suck electricity and dollars out of your wallet. Learn how to stop these vampires.

Your Energy IQ Part 2

A plug in watt meter can tell you how much electricity your appliances are using and costing you. And calculating your Home Heating Index will help you determine if your home is using more energy than it should. A higher Energy IQ will help you make better and more informed decisions about your home's energy use.

ButtonUp NH - Understanding Air Leaks and Sealing



0:36 / 2:00

ButtonUp NH - Insulation



0:22 / 1:23

ButtonUp NH - Next Steps



0:28 / 1:43

ButtonUp NH - Thanks for Watching



0:17 / 0:59

Understanding Air Leaks and Sealing

You wouldn't leave a window open all winter long, but in many houses the amount of air leaks equals the same area of heat loss as that open window. Learn the ABC method for reducing air leaks in your home.

Insulation

After you've identified and addressed air leakages in your home, adding insulation to your attic, basement, walls and on ducts and pipes will help you keep the heat in your home and be more comfortable.

Next Steps

Our video series concludes with some suggested next steps and resources to help you further reduce your energy consumption.

Thanks for Watching

A brief recap of the highlights of the Button Up New Hampshire video series.



Button Up Progress Report

Dec 1, 2011 – March 31, 2012

Executive Summary

The third season of Button Up NH weatherization workshops resulted in 34 regional workshops in 25 cities and towns throughout New Hampshire and reached more than 700 residents. The workshop series was coordinated by the University of New Hampshire in partnership with Clean Air-Cool Planet, Plymouth Area Renewable Energy Initiative (PAREI), UNH Cooperative Extension, and the Lakes Region Community College. Button Up workshops are designed to teach residents the basics of home energy use and loss, the value of a home energy audit, the short term benefits of simple do-it-yourself weatherization, the long term benefits of extensive energy retrofits, and the technical and financial resources available to implement energy reduction projects. Workshops are conducted by Button Up NH trained energy professionals in collaboration with local workshop organizers. The program was initially developed in 2008 by Central Vermont Community Action Council with the support of Efficiency Vermont and the Vermont Energy and Climate Action Network. In 2009, it was modified and tailored to New Hampshire residents.

Two distinct workshops were offered this year. The first workshop, Button Up 101: A Workshop on the Basics of Home Energy Savings, is intended for audiences that would like an introduction to the simple to moderate actions that can be taken to reduce home energy consumption. The advanced workshop, Button Up 201: An In-Depth Workshop for Controlling Energy Costs, is oriented to homeowners who have implemented many energy-saving actions in their homes already and are ready to take more substantial measures, such as air sealing or insulation. Communities were free to select either or both workshops and 4 municipalities hosted both workshops on the same day. Of the 34 workshops presented this year, 53% were Button Up 101s and 47% were Button Up 201s.

Workshop attendance averaged 21 people per workshop. We believe the unusually warm temperatures this winter had a dampening effect on attendance overall, particularly those workshops offered in the latter part of March and through April. Workshop attendance averaged 31 people per workshop from mid January through mid-March, and 9 attendees per workshop from mid March through April. Many organizers and prospective workshop organizers also indicated that workshops would be much better received by their residents if offered in the fall through early winter.

This interim progress report overviews our activities, milestones, and accomplishments from Dec 1, 2011 through March 31, 2012. A final project report which will include evaluations of the workshop series, post-workshop interviews and assessments with attendees, and our recommendations for moving the Button Up program forward in the next year will be submitted in May.

Workshops

Workshops were held in 25 cities and towns throughout New Hampshire in 2011/2012:

| Type | Workshop | Date | Location | Sponsors | Presenter |
|-------|-----------------|--------|---|---|-------------------------------|
| BU101 | North Haverhill | Jan 14 | UNH Cooperative Extension at Grafton County Complex | Executive Councilor Ray Burton; UNH Cooperative Extension; Foggs Hardware; Polar Solar; PAREI | Gil Richardson |
| BU101 | Manchester | Jan 23 | PSNH Energy Park | UNH Cooperative Extension; Manchester Community College; PSNH; NeighborWorks Greater Manchester | Paul Chalifour and Josh Zylak |
| BU101 | Sandwich | Feb 1 | The Doris L Benz Community Center | Sandwich Energy Committee; GALA; Tamworth Energy Committee; Center Harbor Energy Committee; PAREI | Craig Cadieux |
| BU101 | Amherst | Feb 2 | Amherst Library | Town of Amherst; Amherst Library; Amherst Conservation Commission | Paul Chalifour and Josh Zylak |
| BU101 | Goffstown | Feb 9 | UNH Cooperative Extension at Hillsborough County | Goffstown Energy Committee, UNH Cooperative Extension | Paul Button |
| BU101 | Exeter | Feb 21 | RiverWoods at Exeter | Workforce Housing Coalition of the Greater Seacoast, RiverWoods at Exeter, ReVision Energy, Town of Exeter, Exeter Energy Committee | Paul Chalifour and Josh Zylak |
| BU101 | Andover | Feb 21 | Andover Town Hall | Andover Energy Group; Andover Conservation Commission; Andover Library Trustees; Proctor Academy | Bob Eldredge |
| BU101 | Durham | Feb 23 | Oyster River High School | Community Church of Durham; Durham Energy Committee; Lee Energy Committee; Oyster River Sustainability Committee; UNH Department of Natural Resources | Dana Mosher and Josh Turgeon |

| | | | | | |
|-------|------------|--------|---|---|--------------------------------|
| | | | | and the Environment | |
| BU201 | Durham | Feb 23 | Oyster River High School | Community Church of Durham; Durham Energy Committee; Lee Energy Committee; Oyster River Sustainability Committee; UNH Department of Natural Resources and the Environment | Dana Mosher and Josh Turgeon |
| BU101 | Milford | Feb 28 | Hitchiner Manufacturing Company (Barn Restaurant) | Hitchiner Manufacturing Company; Town of Milford; Wilton Lions Club | Andy Duncan |
| BU201 | Milford | Mar 3 | Unitarian Universalist Church of Milford | Monadnock Energy Resources Initiative (MERI); NH Green Coalition; Unitarian Universalist Church of Milford | Andy Duncan |
| BU101 | Ossipee | Mar 4 | Ossipee Town Hall | Carroll County United; Ossipee Economic Development Committee; Skehan Home Center; Indian Mound Hardware. | Stacy Sand |
| BU201 | Conway | Mar 5 | Conway Public Library | Conway Public Library; Chick Home Center; Cormack Construction | Stacy Sand |
| BU101 | Seabrook | Mar 8 | Seabrook Public Library | Seabrook Public Library; Atlantic Green Energy; Harmony Energy Works Inc. | Paul Button |
| BU101 | Nashua | Mar 10 | Greater Nashua Home Show | Northern Show Management and Joyce Cooling and Heating | Bob Eldredge |
| BU101 | Nashua | Mar 11 | Greater Nashua Home Show | Northern Show Management and Joyce Cooling and Heating | Bob Eldredge |
| BU201 | Lancaster | Mar 14 | Weeks Memorial Library | SUNREI, Garland Mill, J Myers Builders | Gil Richardson |
| BU201 | Andover | Mar 15 | Andover School | Andover Energy Group; Andover Conservation Commission; Andover Library Trustees; Proctor Academy | Bob Eldredge |
| BU201 | Bethlehem | Mar 15 | Bethlehem Elementary School | SUNREI; Ammonoosuc Regional Energy Team; WREN | Gil Richardson |
| BU201 | Seabrook | Mar 22 | Seabrook Public Library | Seabrook Public Library; Atlantic Green Energy; Harmony Energy Works Inc. | Paul Button |
| BU201 | Atkinson | Mar 24 | Kimball Public Library | Atkinson Energy Commission; Kimball Public Library; Atkinson Lions Club | Eric Sandberg |
| BU101 | Orford | Mar 24 | Rivendell Academy | Orford Energy Committee; Fairlee (VT) Energy Committee; COVER; Window Improvement Masters | Jon Haehnel and Gil Richardson |
| BU201 | Orford | Mar 24 | Rivendell Academy | Orford Energy Committee; Fairlee (VT) Energy Committee; COVER; | Jon Haehnel and Gil Richardson |
| BU101 | Tuftonboro | Mar 29 | Tuftonboro Town House | Eastern Lakes Region Housing Coalition; Wentworth Economic Development Corp; Tuftonboro Association | Stacy Sand |

| | | | | | |
|-------|--------------|--------|-------------------------------|--|---------------------------|
| BU201 | Tuftonboro | Mar 29 | Tuftonboro Town House | Eastern Lakes Region Housing Coalition; Wentworth Economic Development Corp; Tuftonboro Association | Stacy Sand |
| BU201 | Hancock | Apr 5 | Hancock Public Library | Hancock Public Library; The Harris Center; Hancock Energy Advisory Team (HEAT) | Chip Adams |
| BU101 | Keene | Apr 10 | The Waldorf School | Transition Keene; Monadnock Sustainability Network; Home Energy Efficiency; The Waldorf School | Chip Adams and Andrew Dey |
| BU201 | Wolfeboro | Apr 10 | Wolfeboro Public Library | Global Awareness Local Action (GALA); Wolfeboro Energy Commission; Maxfield Real Estate | Craig Cadieux |
| BU201 | Keene | Apr 10 | The Waldorf School | Transition Keene; Monadnock Sustainability Network; Home Energy Efficiency; The Waldorf School | Chip Adams and Andrew Dey |
| BU101 | Sandown | Apr 11 | Sandown Town Hall | Sandown Local Energy Commission; Sandown Conservation Commission; PJ D'Amore Construction, LLC; Home Innovations Corp. | Eric Sandberg |
| BU101 | Portsmouth | Apr 14 | Pease Air National Guard Base | Pease Air National Guard | Bob Tortorice |
| BU201 | Portsmouth | Apr 15 | Pease Air National Guard Base | Pease Air National Guard | Bob Tortorice |
| BU201 | Peterborough | Apr 21 | NH Ball Bearing | New Hampshire Ball Bearing, Jaffrey Chamber of Commerce, Peterborough Chamber of Commerce | Eric Sandberg |
| BU201 | Mason | Apr 30 | Mason Town Hall | Mason Board of Selectmen; Mason Conservation Commission | Paul Button |

Significant Milestones and Activities

During the months of December and January, the Button Up project partners met weekly to determine the structure of the Button Up 2011-2012 workshop series. Led by Lakes Region Community College, we developed two presentations: BU101: A Workshop on the Basics of Home Energy Savings and BU201: An In-Depth Workshop for Controlling Energy Costs. Both presentations were reviewed by several external (to our group) energy professionals and then refined based on their feedback.

We also identified a cadre of 19 skilled and credentialed energy service professionals to be Button Up NH presenters for our workshops this year. More than half of the professionals were Button Up presenters in previous years. All five regional Community Action Programs (CAPs) provided substantial in-kind support to Button Up through the

use of their energy auditors as Button Up presenters. We developed a curriculum for training the presenters and held a webinar training session on January 6th and a second, in-person training session on January 30th at the Belknap-Merrimack CAP agency in Concord.

During our first two months, we developed the promotional materials that were needed to publicize the workshops such as sample press releases, newsletter articles, promotional fliers, and the Button Up website: <http://myenergyplan.net/buttonup/>. We hired the communications consulting firm, Jackson, Jackson, and Wagner, to guide the development of our promotional materials. We also developed supporting materials that were essential for a successful workshop series. Some of these documents included: A Responsibilities of Workshop Organizers Guide, Sign-In Sheets, and Workshop Evaluations. We developed the curriculum for training workshop organizers/hosts and provided our first webinar for organizers on Jan 13th.

We also undertook an ambitious recruitment effort to reach out to prospective workshop hosts throughout the state through networks the program partners have in place. We are placing particular emphasis on reaching underserved populations as well as those not typically engaged on energy issues. Examples of such outreach include; NH Community Loan Fund (especially through Residentially Owned Communities), the 6 NH housing partnerships for affordable housing, faith groups, business community, trade groups and regional economic development organizations. Particular effort was made to reach the disadvantaged North Country.

Two workshops we held in January, the inaugural workshop was held in North Haverhill on Jan 14th and was co-sponsored by Executive Councilor Ray Burton. The second January workshop was held in Manchester on January 23rd at PSNH Energy Park and was organized by UNH Cooperative Extension. Fifty people attended these workshops.

February was the first full month of implementation for the Button Up workshop series. Eight workshops occurred over the month, including seven BU101 workshops and one BU201 workshop. We continued our recruitment effort to reach out to prospective workshop hosts throughout the state through existing networks the program partners have or through allied professionals. We are placing particular emphasis on reaching underserved populations as well as those not usually engaged on energy issues. As an illustration, BU101 workshops were held at the RiverWoods Retirement Community in Exeter (co-sponsored by Workforce Housing Coalition of the Greater Seacoast) and Hitchiner Manufacturing Company in Milford). We also had our first “doubleheader” Button Up workshops in Durham on February 23 with 89 people attending each of the Button Up 101 and 201 workshops.

The “Durham model” of hosting back-to-back Button Up workshops on the same day and at the same location has been replicated in Orford (March 24), Tuftonboro (March 29) and Keene (April 10). Although the workshop requires more planning and

coordination among the organizers, there are also economies of scale that can be realized. There is only one location to be secured, necessary equipment (projector, laptop, screen) need only be reserved once and refreshments provided for one event. Reactions to the back-to-back workshops have been somewhat mixed. While some attendees liked not having to venture out for two separate workshops on two different days, other participants, organizers, and presenters indicated the two workshops simply span too much information to absorb at one event.

Three separate props for hands on demonstrations at the advanced weatherization workshop were created by Andy Duncan of the Lakes Region Community College, with assistance from Josh Turgeon of Community Action Partnership of Strafford County. These props included a stackolator, to demonstrate the stack effect, a Densepack Insulation Air Display, useful in showing the relative impact of airflow on loose fill versus densepack insulation, and an attic air sealing prop, helpful in demonstrating attic and knee wall air sealing opportunities and techniques. Three sets of each of the three props (for a total of 9 props) were kept in regional distribution sites and “checked-out” by the presenters prior to their workshops.

Fifteen Button Up workshops occurred in March and 60% of the workshops (all requests from communities) were the advanced weatherization workshop, the BU201. Although several of the workshops were well attended (70 people attended the Milford workshop on March 3 and 40 people attended the Andover workshop on March 15) overall workshop attendance declined since the previous month. We predominantly attribute the decline to the unseasonably warm temperatures this winter. Several workshops were held on days on which temperatures were in 50's and 60's. It is challenging to inspire people to come to a winter weatherization workshop when the weather is so mild and has been all year. We modified our promotional language used in press releases and newsletter pieces to address the warmer weather, reminding people that Spring is a great time to weatherize a home because homes are more accessible. We also noted that the actions taken to reduce heating costs such as insulation and air sealing can also reduce summer cooling costs.

Nine more workshops have been confirmed and are scheduled in April (<http://myenergyplan.net/buttonup/bunhSchedule.jsp>). Our 2011-2012 workshop series will conclude on April 30th in Mason, NH with a BU201 workshop sponsored by the Mason Board of Selectmen and the Mason Conservation Commission. This is the first Button Up NH workshop to be held in Mason.

Follow-Up Emails

All Button Up workshop attendees who provide their contact information receive a follow-up email from us several weeks after their workshop. This e-mail thanks them for attending the workshop, provides them with a list of helpful web resources, as well as a link where they can download the workshop presentation. A key goal of the follow-up

email is to remind people that they can receive free, personalized assistance with their energy reduction project through our partner programs, UNH Cooperative Extension's Energy Answers and PAREI's Energy Advisors.

Accomplishments

From Dec 1 through March 31 the Button Up Project Partners:

- Conducted 25 Button Up workshop presentations in 18 NH municipalities to 616 workshop attendees
- Planned 9 additional Button Up workshops to be held in April in 7 NH municipalities
- Recruited and received commitments from 19 energy professionals as Button Up NH presenters
- Developed 2 Button Up workshop PowerPoint presentations
- Developed 3 hands-on props demonstrating air sealing principles and/or techniques that were used in the Button Up 201 workshop
- Trained 19 presenters through webinar on Jan 6 and in-person session on Jan 30th
- Recruited and trained 30 individuals to be organizers/hosts of Button Up workshops (several workshops had more than one organizer)
- Develop essential marketing and promotional materials
- Trained and mentored 7 individuals to serve as PAREI Energy Advisors
- Received 21 statewide requests for Energy Advisors
- Mentored or mentoring 12 homeowners who are implementing an energy reduction project
- Answered 14 phone calls and emails from the public through UNH Cooperative Extension's Energy Answers volunteers
- Held a focus group on Jan 23 with 17 members of the public to gather input and feedback on the Button Up program and home energy issues
- Regularly updated the Button Up NH website including a schedule of workshops (<http://myenergyplan.net/buttonup/bunhSchedule.jsp>) and a Google map of workshop locations (<http://myenergyplan.net/buttonup/map.jsp>)
- Received favorable letters of support for the program and workshops from the towns of Durham and Temple [attached]

Personalized Assistance to Residents

A major thrust of the Button Up program this year has been to offer programming and support to homeowners after the workshop as a means to help homeowners implement their energy reduction plans. Several studies have indicated this lack of a “go to” person is the chief obstacle homeowners faced in following through on their energy reduction plans (see Lawrence Berkeley National Laboratory Sept 2010 report, *Driving Demand for Home Energy Improvements*). Efficiency Vermont has also found that one-on-one support is critical to homeowners “pulling the trigger” on energy savings. Many homeowners are ready to undertake a significant home energy reduction project (such as the installation of an efficient heating system or insulating an attic or basement) but have questions or need assistance to begin work on their project. We have provided personalized assistance to residents through 1) the use of trained and highly educated Cooperative Extension Energy Answers volunteers to answer general inquiry energy questions and direct callers to the appropriate resources and 2) through the development of a new PAREI-led network of technically skilled Energy Advisor volunteers who worked one-on-one with households and communicated regularly with homeowners as they worked to complete their energy project.

UNH Cooperative Extension Energy Answers

Through the support of OEP/ARRA grant, UNH Cooperative Extension (UNHCE) staff increased the effectiveness of responding to energy questions from the public through the Energy Answers Volunteer Program, by developing and piloting a “virtual volunteer” component. Virtual volunteering allows trained Energy Answers volunteers to work directly from their homes, answering calls and e-mails from the public and directing residents to the appropriate resources. The benefits to virtual volunteering include the ability for more than one volunteer and staff to provide input into the answers, energy and time savings by eliminating travel time for volunteers, and longer retention of the volunteers as their time spent volunteering is more efficient.

UNHCE staff developed the curriculum and provided the training for Virtual Volunteering. In addition to this training, Energy Answers volunteers attended Button Up workshops, giving them the understanding of what the general public would learn and to anticipate possible follow up questions. These volunteers also provided valuable feedback to the Button Up team by attending a focus group in Manchester organized by UNHCE and Jackson, Jackson, and Wagner (our communications consultant) on Jan 23. With the feedback from the volunteers, the Button Up team made adjustments to the presenters’ training as well as to the Button Up 101 PowerPoint presentation.

UNHCE staff continues to manage the volunteers, while also overseeing the questions and answers that are exchanged. Cooperative Extension staff also provides the

volunteers with continually updated information through the Energy Answers wiki page, E-Extension, and other NH energy partners resources.

Once the Energy Answers Virtual Volunteers were in place these volunteers provided one-on-one energy support to callers and through email. As a result, 14 calls and emails were received and answered from Dec 1 through March 31. Subjects included: light bulbs, radiant heating, window replacement, solar thermal, pellet stoves, and BTU comparisons.

PAREI Energy Advisors

We began our work on this project by creating program guidelines that establish the rationale for developing an Energy Advisor program, set the operational rules, and identify a means to assess the effectiveness of the program. The program guidelines also established goals for the Advisors and gives them some parameters for forming a partnership with the homeowner.

We then created key documents such as a slide to be used in the Button Up PowerPoint presentation that defines what the Energy Advisor program is and encourages workshop attendees to take advantage of the opportunity for one-on-one assistance. We also developed a detailed description of the Energy Advisor program as well as a sign-up sheet and posted both documents on the PAREI website. A template report form for the Advisors to use was also created; this form will give us feedback on the Advisor's visit with the homeowner and provide us with the information needed to determine the efficacy of the program.

As of March 31st, we recruited 7 Energy Advisors in Plymouth, Sandwich, Temple, Wolfeboro, Durham, Keene, and North Haverhill. We also received requests for Advisors from homeowners in the towns of Peterborough, Durham, Wilton, Tuftonboro, New Boston, Nashua, Hancock, Amherst, Tamworth and Haverhill. These homeowners were assigned Advisors and eight site visits (Tamworth, Wilton, Durham (3) Tuftonboro, Peterborough and Haverhill) occurred prior to March 31st.

We currently have 21 statewide requests for Energy Advisors. Out of these, we have begun mentoring 12 homeowners at this time. We plan to assign, at the very least, Advisors to 15 homeowners, as stipulated in our grant proposal. After we reach that goal we will determine what assistance we can provide the remaining six homeowners.

A full description of all mentorships, projects undertaken, observations, obstacles, and recommendations for scaling up the program will be included in the May Button Up final report.

Button Up Video Series

To be successful in our goal of broadening the awareness of energy issues among New Hampshire households, *we must bring the information to them*. We recognize that many residents will simply not attend a workshop in their community despite our best marketing efforts and their interest in learning more about energy reduction. Our grant provided funding to develop a BUNH video series that could be cablecast on local cable access channels and through video sharing websites such as YouTube. Although we considered simply taping each of the two Button Up workshops, this was deemed a less than ideal approach in a multi-media world where people want polished information quickly and with some pizzazz. In March, we selected EVP Inc. of Waterville Valley, NH to produce a series of 1-2 minute short videos demonstrating insulation and air sealing techniques as well as other home energy improvement measures highlighted in the workshops. Peter Adams of EVP is also the co-founder and co-director of PAREI and Peter's depth of knowledge of energy issues and creative talents were key factors in selecting EVP.

EVP has developed a script outlining 15 or so short videos and Dana Mosher of Manchester Community College has agreed to be the "host" of this video series. Video shooting occurred on April 11 and post production processing will be completed later this month with distribution on the BUNH website and through other media outlets shortly thereafter.

Post Workshop Assessments

Written evaluations of the workshops were collected and are being processed this month by Clean Air-Cool Planet. Preliminary results indicate most attendees are very pleased with the presentation they attended and will be implementing actions in their home as a result of the information given at the workshop. In fact, 32% of respondents indicated they intend to have a professional energy audit and 45% of respondents said they will likely undertake a comprehensive air sealing or insulation project.

In March we also developed a questionnaire to survey past Button Up workshop attendees regarding actions they may have implemented as a result of the workshop to reduce their energy consumption. Our communications consultant, Jackson, Jackson, and Wagner, is conducting the survey and will give us a brief summary of their findings; this will be included in our final report in May.



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March 5, 2012

Denise Blaha
Button Up NH
Clean Air Cool Planet
100 Market St, Suite 204
Portsmouth, NH 03801

Dear Ms. Blaha,

We would like to thank you, Button Up NH, and the sponsors of your wonderful Button Up programming for the organizational assistance that you provided for our February 23rd, 2012 Button Up workshops. We had over 100 people attend the two events and experienced an unprecedented amount of positive feedback and a palpable jump in public enthusiasm for energy efficiency for our area.

The presenters were knowledgeable, well prepared with equipment and demonstration materials, and had the timing and delivery of their presentations down pat. From check-in, to workshop, to refreshments and information tables, the event went remarkably smoothly.

Our coalition—the Durham Energy Committee, the Lee Energy Committee, the Community Church of Durham, and the Oster River Cooperative School District Sustainability Committee—had never before collaborated on anything before. And indeed, this was the largest sustainability related program we have seen in this area in recent memory. Our group did not need a single physical meeting to pull off the collaboration.

So many, many thanks for this unprecedented success. Since we were brand new organizers of events of any kind, I can say without reservation that the lion's share of the credit for this successful event should go to the materials and organizing help that Button Up NH organization provided for us.

Our Energy Committee was already swamped with the revision of our master plan and just two of us—Steve Weglarz and myself—volunteered to take on this event planning. Normally that would have been a recipe for at best a qualified success, perhaps a Button Up of a few dozen people similar to what has happened with local Button Up workshops in past years.

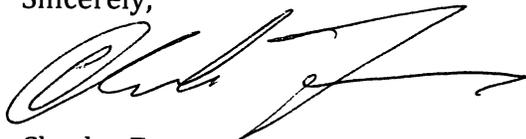
By providing us with a start up webinar, checklists of to-do items, ready-made materials for our cosponsors, and handsome posters for our publicity, the two of us almost alone were able to secure three other groups to help, set up an eventbrite.com ticketing site, canvass the towns with posters, provide text for our town newsletters (key!), and get the word out through Facebook and email lists. Our cosponsors had to do little more than communicate with their own members, and our own energy committee was able to focus on its other business.

Only the promise of a free workshop (we did arrange the food and the additional door prizes with local sponsors), the organizing help, and the professional guidance from Denise Blaha made the event conceivable and the result so successful. We would not have had a Button Up in Durham this year without it.

I am also working with South Church in Portsmouth, and can similarly testify that its busy sustainability committee would not be considering hosting an event without the promise of organizational support provided by Denise and this program. The confidence that the presentations will be of predictable quality, timing, and skill level is also extremely important as Button Ups in the past have gotten mixed reviews depending on the venue and the organizers.

Thank you again for the wonderful work you have done in setting up this program. I hope against hope that we will be able to offer this as an annual or semi-annual program. A special thanks to Denise who was patient, creative, and ever supportive as we two newbie organizers muddled our way through!

Sincerely,

A handwritten signature in black ink, appearing to read 'Charles Forcey', with a stylized flourish at the end.

Charles Forcey
Durham Energy Committee

March 6, 2012

To Whom It May Concern,

The 201 Button Up NH Weatherization Workshop we co-sponsored at the Unitarian Universalist Church in Milford on March 3 was a resounding success. 70 participants came through challenging weather to learn how to safely tighten up their homes and lower their energy costs, and they were amply rewarded. Andrew Duncan led an outstanding interactive two-hour training followed by a lengthy question and answer session. Based on participants' evaluation forms and the degree of focused attention evident during the training, it is clear that the information provided was eagerly sought and genuinely helpful. Many indicated their appreciation for the safety precautions and preventative instructions that were given regarding health and moisture issues, especially those planning to tackle do-it-yourself projects. Some decided to hire professional help. Overall, most seemed to gain a stronger level of confidence about moving into action.

Two other benefits from the event come from the publicity, itself, and the result of cooperative co-sponsoring. Flyers were posted throughout the Milford area, articles placed in local newspapers, emails sent out and announcements made at local events--all highlighting the issue of home energy costs and raising the awareness that steps can be taken--solutions can be learned, to reduce energy usage and lower those costs.

The benefit that grew from the connections between the co-sponsors for the event has a long term pay off. Not only did they collaborate on plans and publicity, but their members baked dishes and brought offerings for the brunch buffet, worked side by side in the church kitchen and pulled together to cover all the various details of hosting the event. In the process, friendships developed and a decision was made to continue working together to bring more community-building projects and activities to the region that will help NH's energy and environmental future.

Bev Edwards
Coordinator for Milford 201 Button Up Workshop

Event co-sponsors: Monadnock Energy Resources Initiative, UU Congregation of Milford, NH Green Coalition and Hitchiner Manufacturing Co.