

**Chapel Hill/Carrboro Pete Street® Energy Education Program**

**Final Report**

August 2013

Prepared by Clean Energy Durham  
For the Towns of Chapel Hill and Carrboro

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The preparation of this report was financed through funds available to the Towns of Chapel Hill and Carrboro from the Energy Efficiency and Conservation Block Grant Program under provisions of the American Recovery and Reinvestment Act of 2009. The views expressed in this report are solely those of Clean Energy Durham.

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### Exhibits

1. Follow-Up Survey Results
2. Hands-On Workshop Projects: Savings, Cost, and Payback

# Chapel Hill/Carrboro Pete Street® Energy Education Program

## Final Report

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### I. Executive Summary

The Towns of Chapel Hill and Carrboro, NC received federal ARRA stimulus funding through an agreement with Southeast Energy Efficiency Alliance (SEEA) to assist property owners in reducing their utility bills. The WISE home energy retrofit program<sup>1</sup> provided qualified home energy improvements through pre-qualified contractors.

To continue building upon the success of the WISE Program, the two Towns selected Clean Energy Durham to provide a community scale energy efficiency education program based on their Pete Street® neighbor-to-neighbor approach<sup>2</sup>. The Pete Street approach trains neighborhood volunteers who lead neighborhood-based workshops where small groups of residents learn simple energy savings projects and behaviors while getting to know each other and building stronger communities.

From program launch in mid-February 2013 through mid-June 2013 a total of 35 neighborhood workshops were held in the two Towns with a total of 211 residents in attendance. Eight residents were trained as Elite Pete® volunteers and they, along with Clean Energy Durham staff, conducted 17



***Hands-On Workshop participant installs weatherstripping on an attic stairs***

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<sup>1</sup> More information about the WISE programs can be found at [www.wiseprogram.info](http://www.wiseprogram.info).

<sup>2</sup> More information about the Pete Street program can be found at [www.petestreet.org](http://www.petestreet.org).

Hands-On Workshops while a combination of Clean Energy Durham staff, neighborhood residents, and the Elite Pete volunteers led 18 Basic Energy Education Workshops.

Following attendance at a workshop, each attendee providing a valid email address received an emailed survey requesting feedback about the workshop and information about what each resident did as a result of attending. 119 total surveys were emailed to attendees and after a reminder email and one or more phone calls a total of 47 surveys were received and tabulated.

Key findings from the survey feedback include:

- 83% of survey respondents reported having done a total of 79 energy saving projects they learned at the workshop in their own home following the workshop.
- 40% of respondents indicated they had taught someone else what they had learned at a workshop (Those 19 people taught a total of 81 other people).
- 18% reported they had completed larger-scale energy efficiency projects in their home following the workshop.
- 95% reported that the energy saving behaviors and activities demonstrated and discussed at the workshops were helpful to them.

## **II. Background**

### **A. WISE Home Energy Savings Program**

Chapel Hill and Carrboro received funding from the American Recovery and Reinvestment Act (ARRA) of 2009 through a funding agreement with Southeast Energy Efficiency Alliance (SEEA). The funding was allocated to primarily help transform and bolster a fledgling market of home energy professionals by incentivizing energy efficiency improvements in Chapel Hill and Carrboro homes and businesses. For the residential sector, qualified homeowners chose from a list of pre-qualified contractors who conducted energy assessments to identify improvement areas and then installed upgrades recommended by the contractor. The Towns provided a range of subsidy levels throughout the program, most commonly a maximum of \$1,500-\$2,000 based on a percentage

of the total project cost after utility rebates had been deducted. Projected energy savings were required to reach at least 15% in order to qualify for the funding.

In November 2012 (Chapel Hill) and January 2013 (Carrboro) the Towns issued Requests for Qualifications for energy efficiency education, outreach and training services for the purpose of engaging community groups and residents in energy education training and workshops as a supplement to the WISE Program. Both Towns selected Clean Energy Durham as the service provider because of their existing Pete Street® neighbor-to-neighbor energy savings education program.

## **B. The Pete Street program**

Clean Energy Durham is a non-profit organization based in Durham, North Carolina whose mission is to move America toward cleaner and safer energy by creating and educating organizations of neighbors helping neighbors save energy. In 2012, Clean Energy Durham launched the Pete Street neighbor-to-neighbor energy education program for use by other communities and organizations. To date, 10 communities have licensed the program for use.

The Pete Street Program is based on three guiding principles:

- **Neighbors are more likely to act on energy saving information received from a trusted neighbor than from a contractor or staff person they do not know.**
- **All residents, regardless of income level or other conditions, deserve an opportunity to reduce their energy bills.**
- **Bringing neighbors together for fun and engaging energy education workshops results not only in the economic and environmental benefits of energy savings but also builds stronger communities.**

The basic elements of the Pete Street program include the training of community volunteers and the participation of residents in one of two types of energy education workshops. The workshops include a one-hour Basic Energy Education (BEE) Workshop and a one and one-half hour Hands-On Workshop (HOW). BEE workshops can be led by anyone with minimal training and include a short educational session followed by a fun and engaging Energy Bingo game. The HOW workshops are led by trained volunteers who have attended a series of training sessions totaling approximately 15 hours. These Elite Pete® volunteers become the real face of the neighbor-to-neighbor energy education program.

After residents attend one of the workshops (many attend more than one workshop) they receive a follow-up survey asking a series of questions to gauge what they have done as a result of attending. This information provides a picture of how effective the program has been in changing energy use behaviors and what energy saving projects have been done by the participants. The survey also asks how many other neighbors each attendee has shared this new information with as a means to gauge the viral effect of the program.

### **C. Chapel Hill/Carrboro program goals, time frames, and roles**

Due to the deadlines for expenditure of the ARRA stimulus funding, this program was on a very short time frame. Agreements were signed between the Towns and Clean Energy Durham in January (Chapel Hill) and March (Carrboro) of 2013. The initial completion dates were May 31, 2013 for both Agreements. Toward the end of the time period, extensions were obtained so that workshops could continue into June and follow up survey and reporting could be conducted in July and August.

The short time frame also impacted the design of the program in a number of ways. First, the Town's expectations were for Clean Energy Durham to provide a complete set of services including training, community outreach, workshop coordination, follow up surveys, and report preparation. This is different than some Pete Street programs where a local community host agency provides some of these services, particularly the neighborhood outreach effort. Given the close proximity of Clean Energy Durham's office location, this was possible but would be problematic in most other communities.

Another impact of the short time frame was in the setting of target goals for workshop participation. In consultation with both Towns, goals were set to conduct 38 workshops and have approximately 300 attendees participate. These were very aggressive goals given the fact that residents had to be trained before Hands-On Workshops could occur and given that Clean Energy Durham staff was not already familiar with the neighborhoods and community leaders in the two Towns.

A third timing constraint was the short application period for residents to apply for the Elite Pete training program. Approximately two weeks was provided for soliciting these volunteers, a much shorter time period than would normally be provided. Even so, an almost full class of eight volunteers was enrolled and seven completed the training and are conducting Hands-On and Basic Energy Education Workshops in the community.

#### **D. *Launch event***

A program launch event was held on February 7<sup>th</sup> at the Seymour Center in Chapel Hill. At this event, town staff, elected officials, community and neighborhood volunteers, and Clean Energy Durham staff discussed the goals for the neighbor-to-neighbor energy education program and brainstormed key neighborhood contacts and leaders who could help with community engagement.

### **III. Elite Pete Volunteer Training**

#### **A. *Recruiting volunteers***

Clean Energy Durham has found that finding volunteers willing to attend the Elite Pete training sessions and commit to teach a number of Hands-On Workshops is feasible, even with the short time frame available for this program. Notices were placed in town e-newsletters and neighborhood listservs, and several presentations were made in front of community service organizations and neighborhood associations. As a result, applications were received from fifteen residents interested in volunteering for the Elite Pete training. Clean Energy Durham staff recommended ten residents to the Chapel Hill and Carrboro program managers. Ultimately eight residents attended the initial training session. After the start of the training one resident decided it was not a good match and dropped out of the program. The remaining seven volunteers completed the training along with two Chapel Hill staff members.

#### **B. *Elite Pete training and apprenticeship***

The Elite Pete training consisted of five sessions on Tuesday and Thursday evenings from March 7<sup>th</sup> to March 21<sup>st</sup>. The sessions were held at the homes of the Elite Pete volunteers and ran around 3 hours each. During the final class on March 21<sup>st</sup> each volunteer received a graduation certificate and a fully-stocked toolbox that could be used at future workshops along with copies of workshop handouts and forms.

Because of the accelerated program schedule, the normal apprenticeship stage was shortened and yet most of the Elite Pete volunteers felt comfortable running Hands-On Workshops without additional staff assistance. Clean Energy Durham staff did attend a number of early workshops to assist the volunteers and

monitor the process, but once the Elite Pete training was completed the volunteers ran most of the workshops.



*The Elite Pete volunteers and staff members at the final training session. From left: Bill Page, Suzanne Lewis Brown, Gayatri Ankem, Jon Paul McClellan, Karena D'Silva, Tom Higgins (Clean Energy Durham staff), John Richardson (Chapel Hill staff), Ann Aylward, Robert Ratcliffe*

### **C. Feedback from Elite Pete volunteers**

At the end of the Elite Pete training sessions, each trainee was asked to provide feedback on the training. The overall responses were very positive. Several suggestions were made for future training programs:

- Integrate the project training into the sessions earlier. The first two sessions were not as interesting and interactive as the later sessions.
- Try to schedule fewer and longer sessions to reduce the number of days the volunteers have to commit to the training.
- Use the project handouts during the training to reinforce how they are used during actual workshops.
- Use more role play workshop exercises during the training
- Pair up volunteers so that they can help each other with their weaknesses

## IV. Community Outreach

### A. *Focus neighborhoods identified*

While the energy education program was established town-wide in both Chapel Hill and Carrboro, program managers in both Towns requested that outreach efforts be focused in several specific neighborhoods. There were a total of sixteen neighborhoods identified. These neighborhoods included:

#### **Chapel Hill Neighborhoods**

- Eastwood/Lakeshore
- Glen Lennox
- Greenwood
- Ironwoods
- Kings Mills
- Lincoln Park
- Morgan Creek
- Northside
- Pine Knolls
- Rogers Road
- Southern Village

#### **Carrboro Neighborhoods**

- Fox Meadow
- Glosson Circle/Alabama Avenue
- Highlands
- Lake Hogan Farms
- Lloyd Street/Broad Street
- Rogers Road

A number of these neighborhoods were on the boundary between the two Towns, such as Ironwoods, Northside, Pine Knolls, Lloyd Street/Broad Street and the Rogers Road area and were identified because they contained many households that found the cost of energy efficiency improvements eligible through the WISE program to be a barrier to participation

### B. *Introductory presentations*

An initial step in the program outreach was to make brief presentations to community and neighborhood groups as a means to enlist hosts for Basic Energy Education workshops. Six presentations were conducted at various venues, including the Seymour Senior Center, the Southern Village HOA meeting, Sierra Club monthly meeting, the Rogers Eubanks community meeting, the NAACP monthly meeting, and the Cathedral of Hope Mission Church. These presentations resulted in three initial BEE workshops and identification of a number of volunteers who were willing to help promote the program moving forward.

### **C. Program outreach**

The Pete Street program depends on utilizing a variety of outreach tools to engage residents in the training and workshops. The more times a resident is exposed to a message about how they can save energy and money doing simple projects around their home, the more likely they are going to follow through and attend a workshop, sign up for training, or just do something at their own residence.

Having the WISE Program structure in place was a benefit. The list of residents who had already participated in the WISE Program or who had expressed an interest in the program was an initial source of training volunteers and workshop participants. The weekly town newsletters and email blasts were also effective outreach tools. This allowed numerous postings during the program, including announcements about the program launch, about the Elite Pete volunteer training opportunity, and about the opportunities to attend workshops and receive free energy savings kits.

Flyers in both English and Spanish were also printed in quantity and used in specific focus neighborhoods, including public housing communities. Program information was also shared with the community at several tabling events, including Earth Day activities at UNC Chapel Hill and a Carrboro Day event.

Paid advertising on public radio was also tried as a means to generate interest in the workshops. However, there was not a good way to determine any impact of that advertising on participation levels.

By far, the most effective promotion of the program was by word of mouth and follow up with workshop attendees. A number of residents attended multiple workshops and many indicated they had passed on the word to their neighbors, friends and relatives.

### **D. Energy kits**

Both Towns provided a small budget for purchase of Energy Kits that could be handed out to workshop attendees as an incentive to complete projects in their own home or apartment. Because of the funding limitations, the Energy Kits were only provided to Hands-On Workshop participants, not Basic Energy Education Workshop attendees. These kits included a refrigerator/dryer vent cleaning brush, a faucet aerator, a low-flow showerhead, switch and outlet insulators, a roll of rope caulk, and an appliance timer. Availability of the free kits was an incentive to attend Hands-On Workshops and the follow-up surveys will provide some feedback (see Section V) on their effectiveness at encouraging participants to

follow through with energy saving upgrades at their own homes and apartments following a workshop.

## V. Results

### A. Workshop Activities

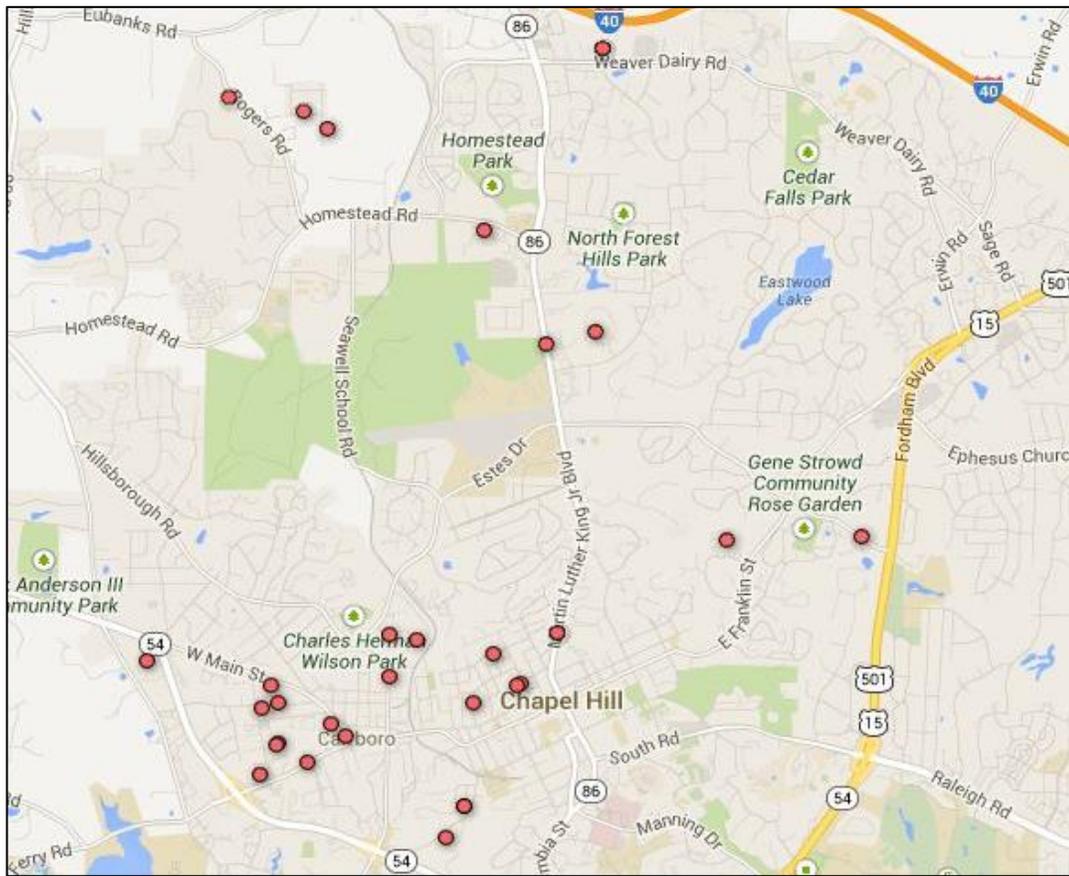
From the program launch event on February 7<sup>th</sup>, there was roughly four months to train the Elite Pete volunteers and organize and conduct energy education workshops in the two Towns. Given that timeframe, the results are impressive. Eight volunteers were identified and received 15 hours of training within the first 30 days. A total of 35 workshops were held at which there were 211 attendees. The number of workshops was on target although the total number of attendees was somewhat short of the 300 target. One reason for the lower number of attendees was that there are usually a few Basic Energy Education Workshops scheduled with larger groups (10+ attendees) and that did not occur here.



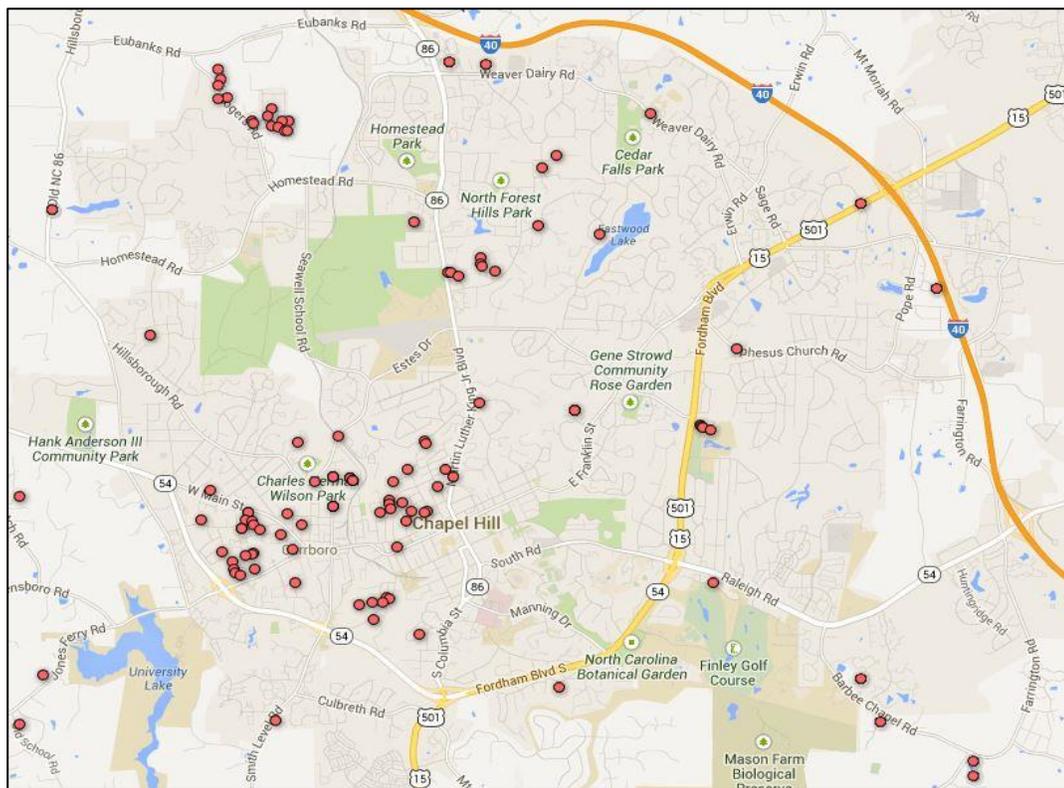
*Elite Pete volunteer Bill Page looks on as residents install outlet insulators during a Hands-On Workshop*

The tables and maps that follow provide information on the breakdown of workshops and participation by type of workshop and location:

<b>Chapel Hill – Carrboro Pete Street Energy Education Program Activity Summary</b>			
<b>Basic Energy Education Workshops</b>			
	# of Workshops	# of Participants	# of Households
Chapel Hill	11	74	66
Carrboro	7	50	46
<b>Total</b>	<b>18</b>	<b>124</b>	<b>112</b>
<b>Hands-On Workshops</b>			
	# of Workshops	# of Participants	# of Households
Chapel Hill	9	48	42
Carrboro	8	39	33
<b>Total</b>	<b>17</b>	<b>87</b>	<b>75</b>
<b>All Workshops</b>			
	# of Workshops	# of Participants	# of Households
Chapel Hill	20	122	108
Carrboro	15	89	79
<b>Total</b>	<b>35</b>	<b>211</b>	<b>187</b>



**Workshop Locations**



**Workshop Participant  
Home Address Locations**

## **B. Follow-up surveys**

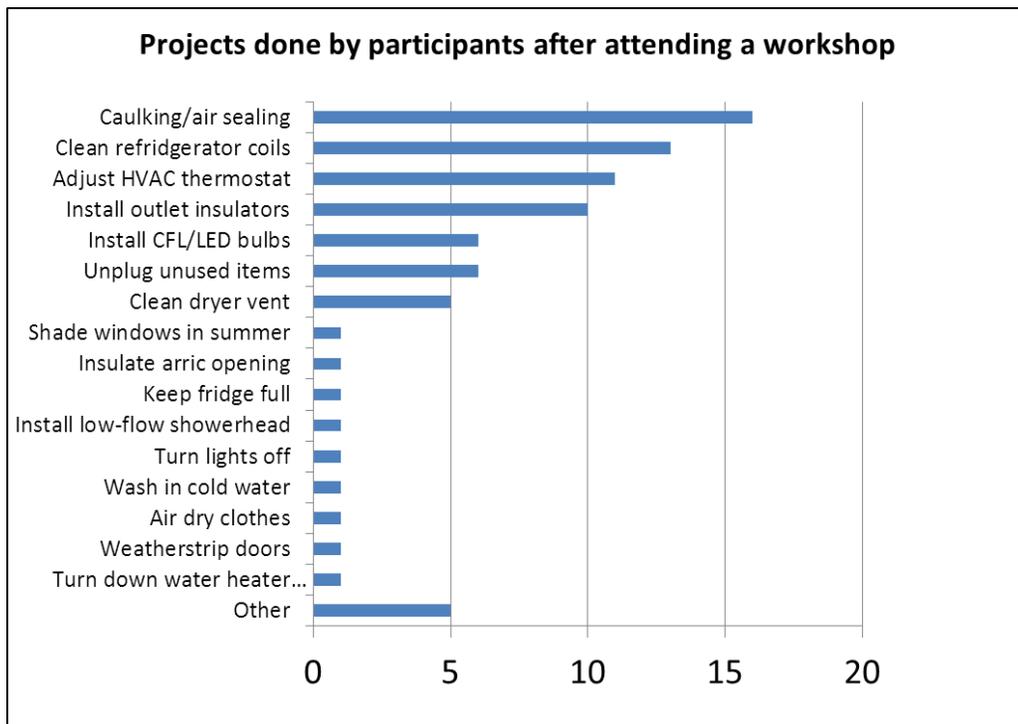
### 1. Survey Method

The Pete Street program uses a survey method to obtain information from workshop attendees. The survey is the same if the attendee went to a Basic Energy Education or a Hands-On Workshop. A Survey Monkey on-line survey is emailed within 30 days of workshop attendance to each attendee that provides an email address when they sign in to the workshop. For those that do not provide an email address, a phone call is attempted to complete the survey. For all attendees that do not respond to the initial email or phone call, another attempt is made by phone call to obtain a response.

A copy of the survey questions and responses is included as Exhibit 1. The primary focus of the survey is to document what actions each attendee has taken to change their energy use behavior. The survey also documents what projects have been done at their home and whether they have passed on their new energy saving knowledge to one or more of their neighbors or community members.

### 2. Survey Responses

- As of August 30<sup>th</sup>, there were 47 completed surveys submitted. This represents 22% of the total attendees and 25% of the 187 households that attended any of the workshops.
- Of the respondents, 60% attended a HOW workshop, 38% attended a BEE and 2% were unsure.
- 83% of those surveyed reported having done a total of 79 energy saving projects they learned at the workshop in their own home after the workshop. The chart on the following page shows the breakdown of energy-saving projects reported.
- 19 people (40% of respondents) indicated they had taught a total of 81 other people something they had learned at one of the energy savings workshops.
- 18% reported they had completed larger scale energy efficiency projects in their home following the workshop.
- 95% reported that the energy saving behaviors and activities demonstrated and discussed at the workshops were helpful to them.



### C. Estimated Energy Savings

Clean Energy Durham has developed a methodology for estimating the energy savings impact of the Pete Street program when the opportunity to receive and analyze participant utility billing information is not available. This “deemed savings” approach uses information from the follow-up surveys of workshop participants to estimate the number and type of energy saving projects that the participants undertake following attendance at either a Basic Energy Education or Hands-On Workshop.

The formula for estimating deemed savings is:

$$D\% = PE^1\% + PE^2\% + PE^3\% + \dots$$

Where

D% = Deemed percentage savings of a participants annual utility bill

PE<sup>1</sup>%, PE<sup>2</sup>%, PE<sup>3</sup>% = Estimated % of an average annual utility bill saved by undertaking each of the 17 energy saving projects that are tracked. (Exhibit 2 provides a listing of all 17 projects and the estimated annual energy savings)

#### Example

$$D\% = .17\% \text{ (clean refrigerator coils)} + .75\% \text{ (install attic hatch weatherstripping)} + 3.80\% \text{ (install CFL or LED bulbs)}$$

$$D\% = .17\% + .75\% + 3.80\% = 4.72\% \text{ annual utility bill savings}$$

Using the estimated utility savings of the 79 projects reported undertaken by the 41 survey respondents to Question #3 on the follow-up survey, the average annual energy use reduction of participants is estimated at 2.67%. The participants ranged from a high of 10.98% estimated savings (clean refrigerator coils, caulk air leaks, install CFL/LED bulbs, install low flow showerhead and aerators, unplug electronics) to a low of .17% (clean refrigerator coils).

Applying the average 2.67% energy use reduction and average NC home use of 13,584 kWh/year (per NC Utilities Commission 2009 report) to an estimated 160 unique households<sup>3</sup> that participated in the program results in the following estimated impact:

- 13,584 kWh/yr. x 2.67% = 362.7 kWh saved per household per year
- At a current rate of 9.3 cents per kWh, this is \$33.73 per household per year
- For 160 total unique households x \$33.73 per household, this is \$5,397 of total savings per year

It should be noted that the "Deemed Savings" estimates are believed to be lower than actual energy savings due to the fact that many of the behavior changes that occur are not captured in the project information. For example, turning lights off, washing clothes in cold water, or keeping your refrigerator full are behavior changes that will reduce energy use but are not projects that are included in the energy saving estimates.

For comparison to the deemed savings results described above, impact data<sup>4</sup> from a similar Pete Street program in Warren County, NC found that participants who attended either type of workshop reduced their electricity use by 7.5% more than electric customers who did not attend a workshop and participants who attended a Hands-On Workshop saw their energy use reduce by an average of 17.5% more than non-attendees. The Warren County program analysis had the benefit of before and after electricity billing data provided by the local electric cooperative.

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<sup>3</sup> Of the 178 households that participated in workshops, an estimate of 160 unique households is being used to adjust for households that attended multiple workshops and participants that did not provide complete address information

<sup>4</sup> Casey J. Wichman, Christine E. Boyle, PhD (2012). Community Conservation: A preliminary evaluation of Clean Energy Durham's neighborhood energy efficiency workshops, University of North Carolina Environmental Finance Center

## VI. Budget Summary

A total of \$64,311 was provided by the two Towns to implement the Pete Street program. This funding came from American Recovery and Reinvestment Act (ARRA) funding made available by the US Department of Energy which granted funds to Southeast Energy Efficiency Alliance (SEEA) who entered into programmatic agreements with Chapel Hill and Carrboro.

The following chart shows a breakdown of the program budget by major funding category. The largest expense was for the personnel costs of Clean Energy Durham for implementing the neighbor-to-neighbor program. The personnel assigned to this program included approximately 1/3 time for both a Community Outreach position and an Energy Education trainer position from February through May. Time was also allocated to the Deputy Director position for overall program oversight. In all, Clean Energy Durham personnel logged 1,117 staff hours for implementation of the program from January through August of 2013.

<b>Chapel Hill – Carrboro Pete Street® Energy Education Program Budget Summary</b>			
<b>Funding Category</b>	<b>Chapel Hill</b>	<b>Carrboro</b>	<b>Total</b>
<b><u>Personnel Fees</u></b>			
Planning & Launch	6,000	2,400	8,400
Community Outreach	11,200	6,900	18,100
Elite Pete® Training	10,560	4,800	15,360
Data Mgmt & Reporting	8,640	3,600	12,240
<b><u>Other Expenses</u></b>			
Pete Street® License	1,070		1,070
Printing	1,200	533	1,733
Energy Kits	2,400	587	2,987
Supplies	2,241	847	3,088
Marketing	1,000	333	1,333
<b>Totals</b>	<b>\$44,311</b>	<b>\$20,000</b>	<b>\$64,311</b>

## **VII. Lessons Learned**

### **A. Overall program design**

- Clean Energy Durham was successful in coordinating the neighbor-to-neighbor program in Chapel Hill and Carrboro because of strong staff support from both Towns, an engaged group of Elite Pete volunteers, and the close proximity of the Towns to Clean Energy Durham's office location.
- The short time frame proved to be an opportunity to create immediate excitement about the program although it limited the opportunity to develop a comprehensive marketing effort.

### **B. Volunteer recruitment and training**

- Town and community listservs and e-blasts were very effective at generating Elite Pete applications.
- The seven Elite Pete volunteers who committed to the training program have been great ambassadors for neighbor-to-neighbor energy education.
- More diversity in the Elite Pete volunteer group may have been possible with a longer application time period.
- The volunteers that completed the Elite Pete training program gave it high scores on the post training evaluation. They also felt the hands-on project training could have started earlier and there could have been more workshop role play and practice during the training.

### **C. Outreach and workshops**

- The outreach work done by Clean Energy Durham identified a number of grass-roots neighborhood leaders who regularly interact one-on-one with residents and who would be very effective at distributing information about the program given additional time to do so. Contact information is being provided to Town staff for these neighborhood leaders.
- Churches and other faith-based institutions provided some support but effective promotion through those venues requires more time to integrate into program schedules.
- Announcements through the regular Town email blasts provided a frequent and effective way to get information out about the program

and opportunities to participate as a volunteer, host, or participant in a workshop.

- Public radio messaging did not appear to increase calls or email contacts about the program.
- Community fairs/tabling events were very effective at garnering program sign-ups, particularly the Earth Day event at UNC- Chapel Hill and Carrboro Day.
- The first few Hands-On Workshops were especially good at leading to follow-up workshops with attendees.

## VIII. Sustaining the Program

### A. Coordination by town staff

#### 1. Program documents

During the course of the program, several of the document templates were modified at the request of the Towns. These modified documents, including release forms, flyers, and sign-in sheets have been uploaded for continued use by Town staff.

#### 2. Workshop packages

In order to facilitate continuation of the program and ease of administrative oversight, Clean Energy Durham has created several additional products as follows:

**Basic Energy Education Workshop Folder** – This folder contains everything that a BEE Workshop leader would need to run the workshop (except for the Use/Lose Display Board), including:

- BEE Workshop Leader's Guide
- Bingo Game Cards (set of 6)
- Bingo markers (sheet of 64)
- Sign-In sheets (2)
- I Will Do/Teach Forms (7)
- Energy Checklist (7)

**Hands-On Workshop Handouts Folder** – This set of documents is set up for placement in an accordion folder for use by an Elite Pete volunteer to run

Hands-On Workshops. Included in the folder (with a suggested number of copies of each are:

- Host Agreement and Release (5)
- Workshop Sign-In Sheet (10)
- Participant Release Form (20)
- Project Handout Sheets (10 copies of each project sheet)
- I Will Do/Teach Form (20)
- Energy Checklist (20)

### 3. Roles and responsibilities

It has been the goal from the start to develop an energy education program that would be sustainable after this initial outreach effort. This requires continued support from Town staff, continuing commitment of at least some of the current Elite Pete volunteers to lead workshops, and some level of continued promotion of the program at the local government and neighborhood levels. Not all of the current Elite Pete volunteers may choose to continue past their initial commitment but at least several have indicated a desire to do so. To encourage their continued involvement, the Towns should plan on some type of recognition for their dedication and commitment. It is also recommended that staff meet with the volunteers and/or communicate via email to indicate the Town's ongoing support and level of commitment to the program.

Ideally additional partners would be identified that would be interested in assisting with some of these roles, although none have been identified at this point.

Each Town will need to determine the level of continuing support they want to provide for this energy efficiency education effort. The goal has been to create a structure that would be as easy as possible to manage. The following is a brief list of the key tasks to continue the program:

#### **Town Staff**

- Publish information about the impact of the program in Town publications and websites
- Promote the program via presentations to community and neighborhood groups
- Maintain list of interested participants and workshop hosts

- Coordinate scheduling of workshops with hosts, Elite Pete volunteers, and residents
- Conduct BEE Workshops as requested
- Continue to provide follow-up surveys to new workshop participants and monitor results
- Maintain inventory of energy saving kits, handouts, and any other incentives
- Provide support to Elite Pete volunteers as needed

### **Elite Pete Volunteers**

- Promote the program as opportunities arise
- Coordinate with workshop hosts
- Conduct HOW Workshops as well as BEE Workshops as requested
- Support other Elite Pete volunteers as needed
- Provide sign-in sheets, commitment forms, and other feedback to the town staff following any new workshops

## **B. Outreach for hosts and participants**

It is likely that there will be some continuing interest expressed by residents as a result of the initial program activities. The Elite Pete volunteers may also generate some additional workshop interest. There are several actions that Town staff could take to generate continuing interest. A web site with information about the benefits of the program and how to sign up for a workshop would be a first step. Another would be to interview some of the participants to obtain testimonials that could be used on websites and in newsletters circulated by the Towns.

## **C. Elite Pete volunteer coordination**

Staying connected with the Elite Pete volunteers is crucial. Program managers should attempt to schedule enough workshops so that each Elite Pete (or pair of Elite Pete volunteers) leads at least one workshop every one to two months. This will keep each Elite Pete engaged in the program and maintain a strong relationship with the town staff. Asking the volunteers for feedback is also a good way to maintain these relationships.

## **D. Tracking results**

Keeping track of residents that have expressed an interest in attending a workshop, scheduling them into a workshop, collecting and recording the sign-in

sheets following a workshop, sending out follow-up surveys, and analyzing and reporting on the results on a consistent basis are tasks that need to be assigned to a Town staff member, volunteer, or intern. While not complicated, they do require careful attention to ensure that all interested residents have an opportunity to participate and enjoy the benefits of the energy education program. A simple spreadsheet can be used to track resident interest and follow-up. An on-line sign-up process would be a nice feature to make enrollment and tracking easier but is not required.

The initial program from February through June of 2013 did not attempt to analyze impact using resident utility billing information. In the future, if resources exist and more detailed impact analysis is desired, a sampling procedure could be used to request before and after utility billing information from new workshop participants. However, this is time consuming and at least one year's worth of before and after data is needed to generate reliable results.

#### **E. Budgeting for program continuation**

For the Pete Street program to continue in Chapel Hill and Carrboro, there will need to be some level of staff support. This can be from Town staff or from other partnering organizations that would like to be involved in program coordination. Outside of the staffing cost, there is a need for some funding to provide supplies and materials for the workshops, such as:

**Workshop supplies** – Supplies for a typical Hands-On Workshop can cost from \$10 to \$50 depending on which projects are taught. Providing these supplies free to each workshop host can be a strong incentive for participation.

**Energy-Savings Kits** – The kits provided to all Hands-On Workshop participants was an incentive for participants to do projects at their own home following a workshop. When purchased in quantity (say 25 or more) from a company specializing in selling energy efficiency supplies those kits should cost around \$30 each.

**Printing costs** – Promotion of the program will require some printing of flyers, handouts, Use/Lose display boards, etc. Since the initial program funding provided multiple copies of the Use/Lose boards and Bingo game kits to each town, an ongoing printing budget of \$1,000 or less should be sufficient to operate the program over the next year.

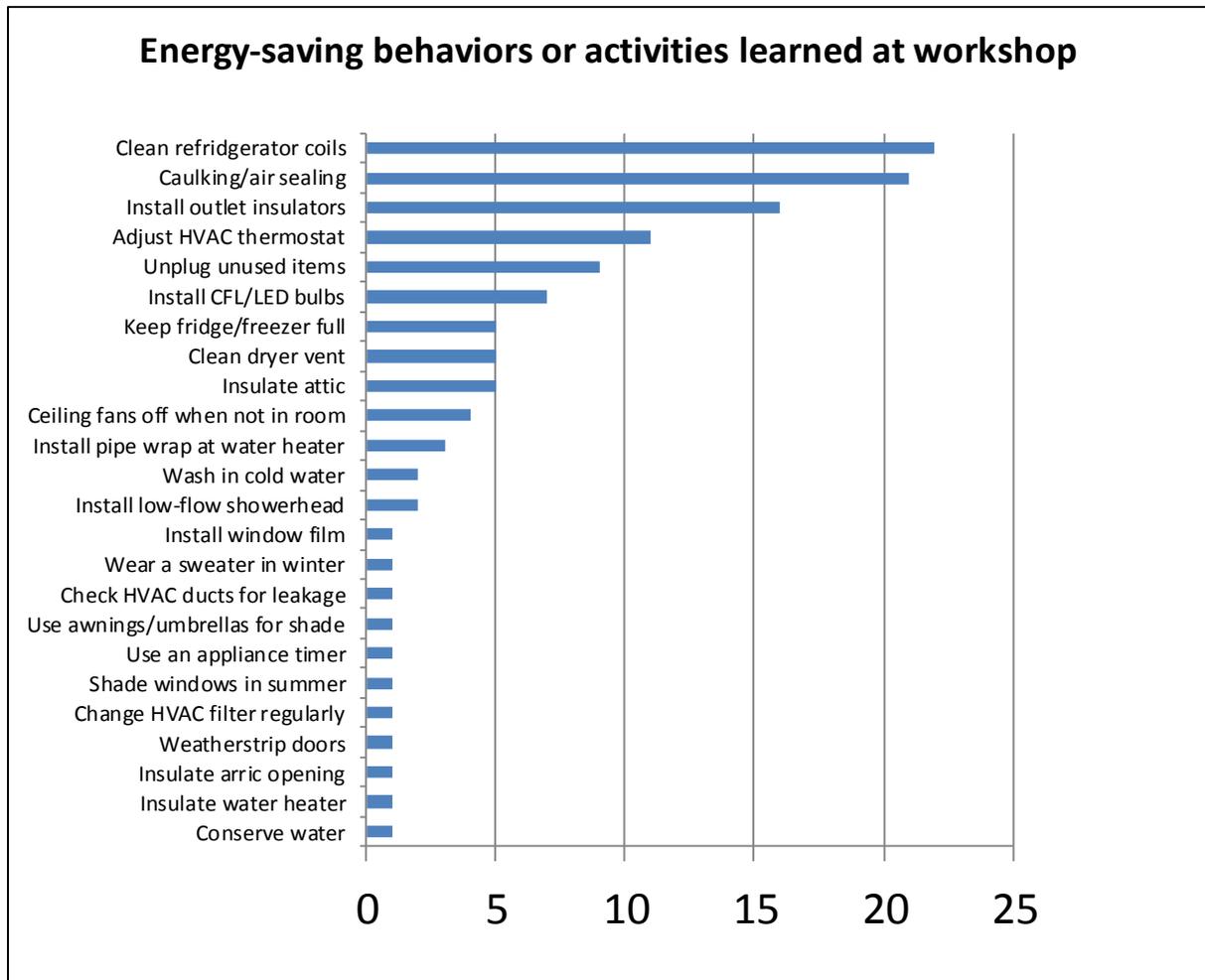
**Exhibit 1**  
**Chapel Hill – Carrboro Pete Street® Energy Education Program**  
**Follow-Up Survey Results** *(as of 8/30/13)*

**Q1 Which workshop did you attend?**

Answer Choices (47 answered)	Responses	
Basic Energy Education (1-hour workshop with BINGO game)	38.3%	18
Hands-On Workshop (90-minute workshop where hands-on projects were done)	59.6%	28
Not Sure	2.1%	1
<b>Total</b>		<b>47</b>

**Q2 Please list the basic energy-saving behaviors or activities you LEARNED at the workshop (e.g., clean refrigerator coils, adjust thermostat, caulk air leaks, etc.). List as many as you can recall.**

Answer Choices (41 answered/6 skipped)	Responses
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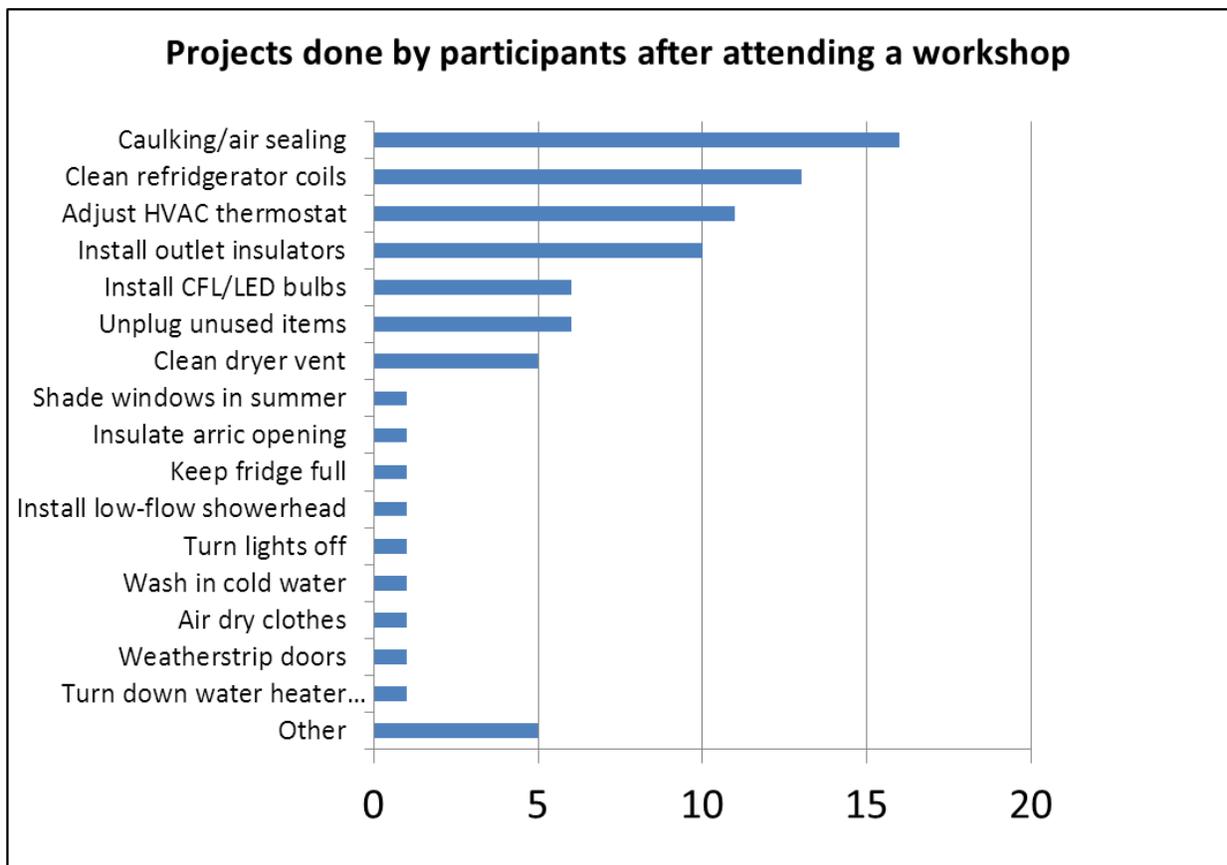


**Q3 Have you DONE any basic energy-saving behaviors or activities in your home as a result of what you learned in the workshop (e.g., clean refrigerator coils, adjust thermostat, caulk air leaks, etc.)?**

Answer Choices (41 answered/6 skipped)	Responses	
Yes	82.9%	34
No	12.2%	5
Not Sure	4.9%	2
<b>Total</b>		<b>41</b>

**Q4 Please list the basic energy-saving behaviors or activities you have DONE in your home since attending the workshop (e.g., clean refrigerator coils, adjust thermostat, caulk air leaks, etc.)**

Answer Choices (35 answered/12 skipped)	Responses
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**Q5 Have you TAUGHT energy-saving behaviors or activities to neighbors or other individuals outside of your community as a result of attending a workshop? Check all that apply**

Answer Choices (41 answered/6 skipped)	Responses	
Neighbors	17.1%	7
Individuals outside of my community (e.g., family or friends living in another community or out of state)	39.0%	16
Have not taught	53.7%	22
<b>Total</b>		<b>41</b>

**Q6 How many people have you taught?**

# people taught	Unsure	0	1-2	3-5	6-10	11+
<b>Responses (19 answered/28 skipped)</b>						
Neighbors	3	2	2	4	0	1
Individuals outside of my community (e.g., family or friends living in another community or out of state)	0	0	8	3	2	0
A total of 81 people were taught at least one energy-saving behavior or activity by the 19 participants who responded to this question.						

**Q7 If you have NOT taught energy-saving behaviors or activities, have you told neighbors/others about the workshop(s)? Feel free to comment below**

Answer Choices (33 answered/14 skipped)	Responses	
Yes	63.6%	21
No	36.4%	12
<b>Total</b>		<b>33</b>

**Comments:**

- I talked to a friend of mine but she wasn't interested in it. I wanted to do a workshop in my home but she wasn't interested.
- Talked to a lot of people about what you can do before the winter comes.
- I have told a few people that I thought the workshop was worth taking. It taught me stuff I didn't know.
- Part of his job.
- I thought workshops were no longer available.
- Told friends about my interest in volunteering for this organization.
- I had to leave the workshop early unfortunately so I did not learn enough to share.
- Mentioned it at one Bolin Creek Co-op meeting. Most of my neighbors have a pretty solid grasp of the basics.

**Q8 Have you undertaken any bigger & more expensive energy-saving projects (Typically done by a professional) in your home, such as adding insulation or sealing ducts, SINCE attending the workshop?**

Answer Choices (39 answered/8 skipped)	Responses	
Yes	17.9%	7
No	82.1%	32
<b>Total</b>		<b>39</b>

**Q9 Would you like to continue participating in the neighborhood energy-saving activities? Please check all that apply.**

Answer Choices (40 answered/7 skipped)	Responses	
Attend a Hands-On Workshop (HOW) where energy-saving projects are demonstrated	30%	12
Host a HOW in my home	5%	2
Attend a training to learn how to lead HOWs (18-hour Elite Pete training)	5%	2
Host a 1-hour Basic Energy Education (BEE) Workshop	5%	2
Lead a 1-hour Basic Energy Education (BEE) Workshop using a step-by-step manual	2.5%	1
Advise me of other energy-saving opportunities	37.5%	15
Not interested	35%	14
Other (please list below)	5%	2
<b>Total</b>		<b>40</b>

**Q10 The length of the workshop was:**

Answer Choices (38 answered/9 skipped)	Responses	
Just about right	94.7%	36
Too short	2.6%	1
Too long	2.6%	1
<b>Total</b>		<b>38</b>

**Q11 Were the energy-saving behaviors or activities demonstrated helpful to you?**

Answer Choices (39 answered/8 skipped)	Responses	
Yes	94.9%	37
No	2.6%	1
Too complicated	0%	0
Too basic	2.6%	1
Not applicable to my home	5.1%	2
<b>Total</b>		<b>39</b>

**Q12 Were the volunteer(s) who led the workshop helpful? Check all that apply.**

Answer Choices (40 answered/7 skipped)	Responses	
Yes	92.5%	37
No	0%	0
Volunteers were knowledgeable	57.5%	23
Volunteers needed more training	5%	2
<b>Total</b>		<b>40</b>

**Q13 Please provide any additional comments or feedback about the workshop you attended.**

Answer Choices (15 answered/32 skipped)	Responses
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**Comments:**

- I thought it was a very good workshop. I thought it was great we were able to do the hands on workshop. Getting the kits were very very helpful. We learned a lot. It was very helpful workshop.
- Did not attend the workshop because I live in an apartment.
- The only thing I can say is it was wonderful.
- It was very helpful. If I knew where another one was going to be and I was available, I would probably attend.
- I think the information we learned made sense but I am bullheaded and haven't tried it yet.
- Just keep it up. There are a lot of people who don't know how to conserve energy, like me before the workshop. But it is not a hard task to conserve energy. If I can do it, anyone can do it.
- The workshop was great. It came at a good time. It's good that the HVAC filters that are reusable.

- Keep the program going because it is very helpful to have someone to talk to and also to be able to do the hands on projects.
- Beneficial and two people from the workshop went on to host.
- Hope it can be expanded!
- Want program to continue! Worried about price increases.
- I really appreciated that each of the strategies was demonstrated to me by someone who knew what they were doing, rather than being given instructions. The tools and items I received were fantastic and helped me implement what I learned much sooner than if I had to go out and acquire them myself.
- Workshop was helpful for save energy and money. Thanks.
- Very helpful to me as I am a retired widow with very little income so all info that helps me save is wonderful!
- Very good stuff, even for an Environmental Studies grad from 2004 who has spent almost a decade on energy conservation I learned a lot.

## Exhibit 2

### Hands-On Workshop Projects: Savings, Cost, and Payback

Project Description	Workshop Energy Savings*	Annual Savings	Technique Cost for Supplies or Equipment	Payback Period (months)
Clean refrigerator coils	0.17%	\$3.46	\$5.34	18.5
Install outlet/switch insulators	0.65%	\$12.97	\$9.59	8.9
Caulk air leaks, heating/cooling vents	0.26%	\$5.19	\$4.88	11.3
Caulk air leaks, plumbing	0.84%	\$16.86	\$4.88	3.5
Caulk air leaks, windows & doors	1.36%	\$27.24	\$9.76	4.3
Install reusable heating/cooling filter	1.18%	\$23.56	\$8.51	4.3
Caulk air leaks, floors, walls & ceilings	2.01%	\$40.20	\$14.64	4.4
Install door weatherstripping/door sweep	1.10%	\$22.00	\$6.73	3.7
Install attic stairs/hatch weatherstripping	0.75%	\$15.00	\$2.59	2.1
Clean & unkink dryer vent	0.33%	\$6.68	\$5.34	9.6
Insulate pipes near water heater	0.97%	\$19.46	\$11.00	6.8
Install insulating water heater wrap	0.67%	\$13.40	\$17.69	15.8
Install CFLs/LEDs	3.80%	\$76.00	\$12.68	2.0
Put up window film	0.97%	\$19.48	\$11.72	7.2
Install low-flow faucet aerators & showerheads	4.80%	\$95.93	\$18.96	2.4
Install programmable thermostat	3.24%	\$64.86	\$26.67	4.9
Use power strips for computers & electronics	1.50%	\$30.00	\$6.98	2.8
<b>Totals</b>	<b>24.60%</b>	<b>\$492.29</b>	<b>\$177.96</b>	

\* Percent energy savings based on a typical annual household energy bill of \$2,000