GREENHOUSE GAS EMISSIONS REDUCTION FUND Quarterly Progress Report Form

Organization Name: Plymouth Area Renewable Energy Initiative

Program Title: Efficiency Training Program

Program Contact: Sandra Jones and Zak Brohinsky

Reporting Period 1/01/2013 - 3/31/2013

- 1) Summary of work completed during this reporting period.
 - a) Provide a summary of activities relevant to this grant using Exhibit A of your contract as an outline. Include summaries of work completed by all project partners.

PAREI staff worked with EVP Marketing & Media to produce three (3) Button Up NH residential energy testimonial videos. Anecdotal evidence from energy organizations and community members suggested the need for on-the-ground case studies outlining individuals' experiences when weatherizing their homes. The three videos produced touch upon different aspects of the weatherization and renewable energy processes that speak to the broad motivations for getting involved. Issues discussed in the videos were the Home Performance with Energy Star program, solar hot water systems, photovoltaic systems, air sealing and insulating. Each video outlined the benefits for implementing energy improvements including the following areas: lower energy usage, lower energy bills, and a more comfortable house. These videos will be used to develop a contractor marketing support kit for contractors to send to potential clients.

Short Term Courses/Housewarmings

PAREI/ETP developed, scheduled and conducted two of five NH Button Up Workshops this quarter. The workshops, held in Lebanon and Peterborough on February 7th and March 6th respectively, were presented to a combined total of 35 attendees. Now that an updated working template of the workshop and presentation has been developed, the following three are in the process of being scheduled for next quarter(s). ETP has worked with UNH to keep My Energy Plan website <<u>www.myenergyplan.net/buttonup</u>> updated with dates and locations of these Button Up workshops. ETP worked with local organizations to help publicize the workshops. In particular, town libraries proved to be helpful in supporting the events.

PAREI and Lakes Region Community College (LRCC) worked together to update the 2012 Button Up NH presentation, which has been used in eight (8) NH Button Up Workshops in NH towns and cities served by Liberty Utilities Natural Gas, with at least two (2) more scheduled. In addition, the presentation has been used in four (4) NH Button Up Workshops in Plymouth on behalf of Plymouth Better Buildings and the Plymouth Energy Committee with one (1) more scheduled in May. The previously developed NH Button Up Workshop 101 was adapted to include additional Do-It-Yourself tips and information on the statewide programs including how to sign up for the Home Performance with Energy Star (HPwES) program. The presentation can be viewed at: www.plymouthenergy.org/BU. Presenters have been provided the eight educational Button Up NH videos (produced at the end of the last Button Up NH grant via UNH) that were developed and encouraged to use throughout the presentation as a way to connect with attendees.

PAREI has conducted four (4) site visits to potential recipients of the weatherization raffle item that was part of the Plymouth Area Community Closet's (PACC) event titled Keep The Heat On. The weatherization package, valued at \$1500, was donated by PAREI/ETP staff

and volunteers, along with several local contractors, and offered to provide a community member on fuel assistance a "Button Up Your Home Work Day". PAREI is currently assessing the four potential sites based on greatest level of need that will fit the skills of those involved in the donation. The recipient will be selected shortly and will work with the homeowner(s) to live more comfortably, reduce their energy bills, and provide a hands-on opportunity for the community to learn about similar work that can be done in their homes.

The free energy audit that was raffled off in December by the Monadnock Energy Resource Initiative (MERI) was conducted by PAREI/ETP staff at a home in Marlborough in January. The homeowner received a thorough site visit with introductory building science concepts, certain immediate do-it-yourself measures, and a formal written energy audit for their home. Equipment from the Monadnock Energy Equipment Rental Program was used to conduct the site visit and audit.

ETP staff held a preliminary energy audit and energy equipment demonstration at the Grapevine Community Center in Antrim on February 16th. The first hour was spent discussing the general idea behind audits, the equipment involved, and common findings. Blower door and infrared camera guided the building inspection that led to significant air sealing opportunities, and an interior wall was found to be cold, leaky, and uninsulated due to it being connected to an unconditioned attic. These, along with a list of other improvements, were remedied in late March during a two-day weatherization workshop.

Over two days (March 10^{th} & 23^{rd}) the improvements outlined in the February 16^{th} energy audit at the Grapevine Community Center in Antrim were undertaken. Together, ETP staff from PAREI & LRCC guided twelve (12) attendees in hands-on weatherization projects including 700 feet of pipe insulation, attic and basement air sealing, interior wall dense pack insulation, and open blow attic insulation. Equipment from the Monadnock Energy Equipment Rental Program was used for the February 16^{th} energy audit and March 10^{th} & 23^{rd} weatherization workshop.

Statewide Workshops

The real estate presentation titled "Energy Issues in Existing Homes: What Real Estate Professionals Need to Know", developed by the Lakes Region Community College (LRCC) and Sustainable Energy Resource Group (SERG), underwent further review along with PAREI in preparation for the accreditation ruling. In late March the NH Real Estate Commission determined the course to be fitting for 3-credit accreditation, up from its previous 2-credits. PAREI plans to assist in at least one (1) in a series of future workshops.

Mentoring/Field Experience Program

Throughout central and southern NH, ETP conducted twelve (12) field experiences in different capacities. Both homeowners and energy professionals received hands-on training in the operation of energy equipment and auditing techniques. As the field experience program has evolved, there is an evident niche for BPI coaching opportunities. In preparation for BPI field exams, many students have requested one-on-one coaching with ETP's certified BPI Building Analyst. So long as the BPI certifying and re-certifying process is in place, PAREI believes there will remain a need for mentoring and field experiences to assist these individuals prior to testing.

b. List quantitative actions in table format below (see directions for more details)

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Course / Event	Location	Date	# Students	# Contact Hours
Two (2) Button Up New Hampshire	Lebanon	Feb 7, 2013		
Presentations hosted by PAREI ETP	Peterborough	March 6, 2013	35	
Provided updated Button Up NH				
Presentation for the use at fifteen (15)				
Button Up New Hampshire workshops				
sponsored by Liberty Utilities and Plymouth	Southern and			
Better Buildings	Central NH	Jan-June 2013	Various	
Plymouth Community Closet: Four (4) site				
visits for Keep The Heat On Housewarming				
Event	Plymouth	Jan-Mar 2013	4	
Grapevine I: Energy Audit & Equipment				
Demo	Antrim	Feb 16, 2013	5	
Grapevine II: Hands-on Weatherization		March 10, 2013		
Workshop	Antrim	March 23, 2013	12	
Three (3) PAREI Residential Energy Projects			Released to	
Case Study/Testimonial Videos	Central NH	Jan – Mar 2013	public	
Real Estate Professionals Workshop				
received 3 credit certification from NHREC	Regional	Jan-Mar 2013	22	
	Monadnock			
	and Plymouth			
Twelve (12) Field Experiences for Trainees	area	Jan-Mar 2013	12	
Energy Equipment Rental Program				
(Plymouth & Monadnock)				
,				
Energy Audit for MERI Raffle Winner	Marlborough	January 2013	Various	

<u>2)</u> List projected annual energy savings by fuel type for all completed energy efficiency projects during this reporting period (see Reporting Instructions for more details.) We are only estimating energy saved on actual Hands On Projects that resulted in the completion of an energy saving measure on a home or business. It is impossible to measure the energy savings that result from information learned at workshops, open houses, housewarmings, demos etc.

Table 2: Projected Energy Savings Summary –					
Fuel	2013Q1				
Oil (Gallons)	250 – 300				
Grapevine	gallons				
Community	annually				
Center					
Electric (kWh)					
Natural Gas					
(Therms)					
Propane					
(Gallons)					

3) Please list total hours worked on the project as required by your contract.

In-House Labor Hours:

Task #	Work Description	Hours worked
DRED ETP Extra		
Goal	Prepare for additional Valuing EE Homes Workshop for Realtors	15
2	Coordinate and conduct Energy Audits Demos, Housewarming and Prep Visits	35
DRED ETP Extra Goal	Coordinate and Produce Three Case Study Videos for use for EE marketing and Release to Public – Including Presentation at PAREI EE	50
DRED ETP Extra Goal	Update BU Power Point Presentation and Handouts, Publicize and Conduct Button Up NH Workshops	45
4	Publicize, Coordinate and Conduct Field Experience Program	22
DRED ETP Extra Goal	Coordinate MERI Equipment Rental Program and Audit Raffle	15
All tasks	Program Coordination, Marketing and Communication of all ETP Program Activities including Equipment Rental Programs	45
All tasks	Overall ETP Program Coordination between LRCC, DRED and NHPUC	60

<u>4)</u> Explain any obstacles encountered or any milestones not reached. *Note any problems or delays. If you have a deviation from the plan, contact the PUC before proceeding and document approved action.*

Although the first two Button Up NH presentations hosted by PAREI/ETP were well attended in February and March, we expect this not to be the case in the coming months. From past experiences, there seems to be a direct correlation between warmer weather and people's decreased awareness and interest in energy efficiency and weatherization. With three Button Up NH presentations scheduled for April-August we will continue to encourage attendance despite this potential challenge.

The Plymouth Area Community Closet (PACC) Keep The Heat On Housewarming Event has taken longer than anticipated to get off the ground. Two factors have impacted the home prioritization process: (1) deciding which homes would have the greatest net benefit from a weatherization work day, and (2) matching a home's needs to the skilled labor involved. For these reasons, ample time has been given to narrowing the selection process in order to make the most efficient choice.

5) Summarize work to be completed next quarter.

Course / Event	Location	Date	# Students	# Contact Hours
One or Two Button Up New Hampshire	Central NH			
Presentations hosted by PAREI ETP		April-June 2013	35	
Multi-day Air Sealing and Insulating Training				
at Habitat for Humanity Building Site	Bristol	April-June 2013	10	
Keep the Heat On Housewarming:				
For Family Receiving Fuel Assistance from				
Plymouth Community Closet	Plymouth	April-June 2013	Various	
One (1) Button Up NH Commercial Energy			Release to	
Testimonial Video – Film and Produce	Central NH	April-June 2013	public	
Contractor Marketing Support Kit			Release to	
containing videos & checklists	Regional	April-June 2013	public	
One (1) Real Estate Professionals Workshop	Regional	April-June 2013	25	
	Monadnock			
Field Experiences for Trainees	and Plymouth	April-June 2013	Various	

	area			
Energy Equipment Rental Program (Plymouth & Monadnock)				
Energy Audit Demo for MERI Raffle Winner	Regional	April-June 2013	Various	

PAREI staff will work with EVP Marketing & Media to produce one (1) PAREI/ETP commercial energy testimonial video. Considering the success of previously produced residential videos, staff discussed the benefits of including commercial projects in the series of testimonials. Once the commercial video is finished, PAREI will work on developing a Contractor Marketing Support Kit for regional contractors to send to potential customers. Two kits will be developed – (1) Initial Inquiry Kit, and (2) Post-Energy Audit Kit – will include the testimonial videos and several preliminary improvement checklists. The Initial Inquiry Kit is aimed at informing homeowners and encouraging participation in weatherization measures, while the Post-Energy Audit Kit is to bridge the gap between a homeowners' understanding of energy issues and implementing recommended improvements. These kits will be made available to interested contractors to send to potential clients.

Short Term Courses/Housewarmings

PAREI's ETP program will conduct at least one more NH Button Up Workshop and two more if our contract is extended for another quarter. We currently have one scheduled for June 3rd to take place at the Forest Society in Concord. ETP will continue to work with local organizations to help publicize the events, and UNH to keep My Energy Plan website updated with dates and locations of the upcoming Button Up Workshops.

Staff will meet shortly to choose from the four (4) potential recipients of the weatherization raffle item as part of the Plymouth Area Community Closet's (PACC) event titled Keep The Heat On. A homes assessment will be based on two primary factors: 1. how great is the need, and (2) how well the homes needs fit the skills of those who have donated their expertise. Once a recipient has been chosen, PAREI will work with the homeowner and experts to identify projects to be completed, and the work will be done by June 30th, 2013.

Working with Pemi Valley Habitat for Humanity, PAREI will conduct at least one (1) multi-day hands-on volunteer based training on one of the four Energy Star Certified Habitat Homes in Bristol, NH. Volunteers will be introduced to basic building construction and building science theories, and detailed installation concepts pertaining to individual projects. Daily tasks will include intensive air sealing, dense packing insulation, ventilation and duct work, installation of heat recovery ventilators (HRV) and bathroom and kitchen fans.

On May 4th during the 6th Annual Greenerborough Festival in Peterborough, the Monadnock Energy Resource Initiative (MERI) will collect names for another free energy audit raffle that will be conducted with ETP staff. The winner of the raffle will receive a thorough site visit with introductory building science concepts, certain immediate do-it-yourself items, and a formal written energy audit of their home from which to work from for any and all future weatherization and energy efficiency measures.

Statewide Workshops

The real estate presentation titled "Energy Issues in Existing Homes: What Real Estate Professionals Need to Know", developed by the Lakes Region Community College (LRCC) and Sustainable Energy Resource Group (SERG), has been accredited for 3-credits from the NH Real

Estate Commission. PAREI will assist in at least one (1) future real estate professional workshop, which will likely be held in central NH. Topics covered in the workshop include: how real estate professionals benefit from understanding residential energy use patterns, why some homes use a lot of energy, where the primary sources of energy usage are, and what programs and incentives are available to reduce energy costs and improve building performance.

Mentoring/Field Experience Program

PAREI will continue to offer the existing field experience program. Considering the success of the BPI coaching option, staff plans to keep this service open so long as LRCC continues to provide BPI testing. Although we offer field experiences to contractors/home builders for the purpose of acquainting them with the energy auditing equipment available for renting or to review with them new building techniques for better insulated homes, we rarely get a request for these services from that demographic. The main reason why people want to set up a field experience with a BPI building analyst is so they can practice the field test portion of the BPI Building Analyst exams. We anticipate conducting at least six field experiences in the upcoming quarter.