GREENHOUSE GAS EMISSIONS REDUCTION FUND Quarterly Progress Report Form Calendar Year 2011, Quarter 2 – ETP Program DRED/LRCC/PAREI

Organization NH Department of Resources & Economic Development / Lakes Region Community College Name: (DRED/LRCC) and supporting partner, Plymouth Area Renewable Energy Initiative (PAREI)

Program Title: Efficiency Training Program (ETP)

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Reporting Period 4 /01/2011 - 6 /30/2011

1) Summary of Work Completed During This Reporting Period

1a) Narrative Summary of Activities

DRED in partnership with LRCC and supporting partner PAREI provide job training classes to prepare New Hampshire's workforce for green energy jobs in the energy efficiency sector. Classes are supported by a Mentoring Program to give qualified candidates supervised hands-on experience with both energy audits and installations. This program helps to educate locally-based contractors and businesses who can deliver weatherization installations in a safe and sound manner. To meet the market demand trainings are offered to students at different skill levels (from do-it-yourself homeowners to experienced professionals) throughout the state.

1. BUILDING ANALYST TRAINING COURSES

A Building Professional Institute (BPI) Building Analyst training course was completed in March, just prior to the beginning this reporting period. However, the BPI Building Analyst field exams did take place during this quarter. These are two hour field exams in existing homes, with one LRCC BPI proctor for each student, are important for testing the abilities of students.

Another BPI energy auditor class did take place in early April entitled "BPI Envelope Professional." The Envelope Professional BPI certification is similar to but more advanced than the Building Analyst certification, with more emphasis on developing a detailed work scope of building shell energy improvements. This class was three days of instruction plus a field exam review day. Some of the students in the Building Analyst class also took the Envelope Professional class. As part of field instruction, students conducted energy diagnostic tests on the Tuftonboro old town hall as well as the New London town hall, in addition to a number of existing single family homes.

LRCC initiated an alternative "Fast-Track" BPI Building Analyst certification program for existing energy professionals who want a streamlined approach to becoming Building Analyst certified. Course material is offered online via LRCC's Blackboard online teaching system, a field review day is included in the package, in addition to the BPI Building Analyst written test and field test for certification. This program is also aimed at existing Building Analysts who need BPI recertification. During this quarter LRCC's ETP program manager took the BPI Building Analyst field exam in Massachusetts as part of his three-year recertification as a Building Analyst.

2. AIR SEALING AND INSULATION INSTALLER CLASSES

The first air sealing and insulation installer class was offered in April. Entitled "Pilot Building Envelope Retrofit Mini Boot Camp" this training course served as a precursor to offering BPI Air Leakage Control Installer certification later in the year. Class enrollment was purposefully kept small for this pilot course. Joint

instruction, use of equipment and warehouse location were contracted with an energy performance company. Course reviews were positive, with a keen interest from students to make the instruction as real-world as possible using actual buildings and/or realistic building props.

There was additional planning work this quarter to find additional collaborators for this installer training, locate potential warehouse training locations, and develop an appropriate curriculum to meet the needs of students as well as provide sufficient preparation for BPI Residential Building Envelope Whole House Air Leakage Control Installer certification.

Preparation work has been done for Installer Trainings to be held by PAREI and/or LRCC in Plymouth, NH. Three residential and commercial buildings plus one municipal building have been identified for holding installer trainings deigned to train contractor and energy professionals on wall, attic and basement air sealing and insulating. Site visits have been conducted, building owners have been briefed and the best sites for which training are being selected. PAREI will conduct a two day installer training on attic air sealing and insulating while demonstrating the newly purchased equipment for the rental program in October of 2011.

3. BOOT CAMP PERFORMANCE CONTRACTOR BPI TRAININGS

No activities in this area during the 2011 second quarter. Boot camps are planned later in the grant period once the installer classes have been set up.

4. SHORT-TERM ENERGY EFFICIENCY TRAININGS

LRCC's Efficiency Training Program was an exhibitor at the April 2, 2011 Local Energy Solutions conference in Penacook. This was a useful outreach and education effort to the hundreds of participants from town energy committees and related areas.

LRCC provided a second "TREAT Energy Modeling" training in May 2011 in response to interest from the BetterBuildings program as well as others. This was similar to the first TREAT class taught in March 2011. The three-day training covered introductory and advanced topics in using TREAT as tool to model energy savings in existing residential buildings.

In June of 2011, PAREI offered a Housewarming Attic Air Sealing and Insulating Two Day Demonstration for Homeowners, Energy Professionals and Contractors financed by the building's owner. Throughout the course of the demonstration, over 20 people experienced professionals completing weatherization work. The project consisted of vacuuming debris and old insulation from the attic of an apartment building, applying foam spray insulation to air seal the attic, and blowing in cellulose insulation. This event was scheduled to coincide with the BetterBuildings program kick off in Plymouth, NH.

As part of the ETP grant LRCC staff had several discussions with organizations about short-term energy efficiency trainings. Specifically there were discussions with the Sustainable Energy Resource Group (SERG) to move ahead with half-day weatherization training for real estate professionals. We expect this training to be a model for other trainings aimed at professional groups allied to the building energy performance field.

5. ENERGY SERVICES & TECHNOLOGY EFFICIENCY INTENSIVE CERTIFICATE

Although there were some initial discussions about LRCC's ESTEI certificate initiative during this quarter, the ESTEI program is not expected to take place until mid-2012.

6. MENTORING SITE VISITS

There was considerable effort during this quarter to ramp up the Mentoring Program. LRCC and PAREI staff coordinated program materials such as overall Mentoring Program structure, announcements, guidelines for mentors, and sign-up forms. There was also considerable work this quarter to develop a pool of qualified mentors throughout New Hampshire, using already existing BPI proctors as a base. The new Mentoring Program was announced in June 2011 with mentoring trainees expected in the 3rd quarter of 2011.

Preparation also went into the design of the Mentor Program including the creation of Sign Up Forms, Evaluation Forms, Mentor and Trainee Expectations and promotional materials. Three PAREI Energy Auditors have offered to be mentors. PAREI's Mentor Program is being announced on Tuesday, July 26th. An ad was run in our local Buy Local guide as the first effort to promote the program and the trainings. We plan to conduct our first Mentoring Opportunity in August and several more in September.

7. EQUIPMENT PURCHASE AND RENTAL USE

While LRCC did not purchase energy efficiency equipment this quarter, it was involved in researching the equipment needs of NH energy professionals. PAREI move ahead with their equipment rental program and LRCC ETP staff advised PAREI on potential equipment options. LRCC also worked with PAREI to develop and distribute equipment and training needs survey to their respective contact lists. For LRCC, the survey was developed as an online survey in Constant Contact and administered primarily to LRCC ETP training alumni. PAREI used a different online survey system. PAREI did some analysis of the responses during this quarter to support its equipment purchasing decisions.

In preparation for PAREI kicking off the Equipment Rental Program they conducted several meetings to work out co-renting equipment with a local equipment-rental / hardware store. The survey results from energy service professionals, contractors and homeowners helped guide the equipment purchase decisions. Rentals will be available to qualified BPI, HERS, and energy auditing students. This equipment will also be available to contractors and homeowners who sign up for a two hour on site training with prior to renting the equipment. This on-site training will coincide with the program's Mentoring Program and will play a large part in the marketing and outreach to those interested in future rentals and installer trainings. The initial rental equipment includes:

- 1. Minneapolis Blow Door with DG-700 manometer.
- 2. Minneapolis 2 openings Blower Door for large buildings (includes two fans and two manometers).
- 3. DG-700 manometer for zonal and duct leakage testing.
- 4. Large and small pressure pans for duct testing.
- 5. Exhaust fan flow meter for determining the exhaust fan flow rates.

8. SUPPORT FOR OTHER PROFESSIONAL ENERGY EFFICIENCY TRAININGS

LRCC ETP staff, in conjunction with DRED ETP staff, has had conversations with other organizations to support the development of additional energy efficiency trainings. During the first half of 2011 there was legislative uncertainty about the future of this RGGI-funded grant program, therefore the discussions with other organizations were tentative. In the future these discussions will develop important training classes.

OVERALL PROGRAM ACTIVITIES

LRCC ETP staff did significant work this quarter to improve marketing and publicity for trainings. An e-mail contact list was significantly expanded and integrated into the Constant Contact e-mail marketing and online surveying system. LRCC will be working with a marketing company to assist with the focusing of the ETP marketing message and delivery.

1b) Activity Summary Table

Table 1: Activity Summary Table									
Course / Event	Location	Date	# Students	# Contact Hours					
BPI Envelope Professional Course	Laconia	April 2011	6	27					
BPI BA & EP Field Exams	Varies	April- June 2011	17	2					
Local Energy Solutions Conf. Exhibitor	Penacook	April 2011	30	8					
Pilot Retrofit Installer Course	Concord/Bow	April 2011	7	28					
TREAT Energy Modeling Course	Laconia	May 2011	6	21					
Housewarming: Attic Air Sealing & Insulating	Plymouth	June 2011	20	3					
		Total	86	818 hrs					

2) Projected Annual Energy Savings

ETP is a training program. As part of training direct energy savings cannot be measured therefore there is no "Table 2: Projected Energy Savings Summary." (ETP participants will use the knowledge they gain through ETP trainings to recommend and install energy efficiency improvements in homes and businesses throughout NH.)

3) Labor Hour Reporting

Table 3: Labor Hour Reporting

Table 3: Labor Hour Reporting (calendar year)									
'11 Q1 est.	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4		
LRCC 60	719								
PAREI 100	165								
DRED 40	30			·					
Totals 200	914								

These numbers are total labor hours associated with the project per quarter (calendar year), including ETP full-time and temporary employees, estimated hours of ETP independent contractors, and estimated unbilled hours of staff conducting ETP tasks.

4) Obstacles, Problems and Delays

There was considerable uncertainty during the first half of 2011 regarding the future of the RGGI program in New Hampshire, and with that the potential uncertainty of the future of the Efficiency Training Program. This has made long-term program planning a non-definitive process.

After reviewing the results of this and previous quarter's training programs, reviewing preliminary results from the equipment and training survey, and talking with potential students and program administrators, there appears to be a consensus that shorter modularized trainings would be generally preferable over longer "boot camp" type trainings. Going forward this may affect the mix of ETP trainings. Before any major modifications are made, to the overall training program, there will be discussions with all interested parties.

In the current slow-growth economy a relatively weak market for energy efficiency services in turn affects demand for professional energy efficiency trainings. (One bright spot continues to be the number of programs sponsored by electric and natural gas utilities, the weatherization assistance program (Community Action Agencies), the BetterBuildings program, and others.) As a result, Efficiency Training Program staff is working to increase training demand within the framework of the grant training program. One consideration is to develop training targeted to DIY homeowners. Program delivery experience has determined that as homeowners become trained on proper building science they are then more inclined to invest in home weatherization. This investment expands the demand for certified weatherization professionals. A second new training currently under development is that providing BPI's Manufactured Housing Professional Certification. This training will be for auditors and installers interested in weatherizing manufactured housing (MH) throughout NH. A current MH weatherization effort, serving income-qualified homes, is be delivered by NH Community Loan Fund via the NH Community Action Agencies. ETP's related training will complement their program by serving contractors interested in the non-income-qualified MH homeowners.

5) Summary of Work to be Completed Next Quarter

There will be a BPI Building Analyst course offered in August and September, to be held in Nashua with cosponsorship by BetterBuildings New Hampshire. In conjunction with this training, LRCC and BetterBuildings are having an energy auditing publicity event in early August, aimed at both homeowners as well as energy professionals. We are also offering Fast-Track Building Analyst certification for experienced energy auditors.

Tentatively scheduled in September is the four-day Manufactured Housing Weatherization Installer class. Plans for a BPI Air Leakage Control Installer training are being developed for later in 2011. Additional short-term trainings are also being planned for the second half of 2011. The Mentoring Program will be coming into full-swing in the third quarter of 2011. Analysis of the equipment needs survey will also take place in 2011 third quarter, and rental equipment purchases will continue during this quarter. There will be additional work to put in place support for other professional energy efficiency trainings, and the strategic marketing effort will be underway.

Equipment Rental Program: On August 3rd PAREI will officially kick off the ETP Equipment Rental Program with a large e-mail announcement, website posting, in store display, mailing to rental equipment / hardware store customers and posting fliers throughout the community. We plan to purchase the additional equipment starting with an Insulation Vacuum, Infra-red Camera and a cellulose dense pack blower.

Installer Trainings: PAREI will conduct a two day installer training on attic air sealing and insulating while concurrently demonstrating the newly purchased equipment (vacuum and blower) for the rental program in October of 2011.

Short Term Courses and Housewarmings: In September of 2011 and again in November of 2011, PAREI will be conducting hands on Basement Air Sealing and Insulating Short Term Course for contractors, students, and homeowners.

Mentoring Program: On July 26th we will have officially kick off the Mentor Program and will conduct our first Energy Audit with a mentor at a Farm in Dorchester. As a BetterBuildings' approved contractor PAREI will utilize the BetterBuildings' energy audits as opportunities for mentor experiences. PAREI is also offering mentor opportunities to contractors through the equipment rental program. These rentals related trainings will be another way of identifying potential BPI trainees.

6) Beyond the Contract -- Activities, Partnerships, Funding or Other Synergies

The BetterBuildings program has been working with ETP to make sure energy auditors and contractors involved with the BetterBuildings program are sufficiently trained and experienced. The TREAT Energy Modeling computer software course has been an outgrowth of this partnership. ETP's Mentoring Program was created in part from BetterBuildings' interest in providing a path for less experienced energy auditors to gain enough experience to become qualified BetterBuildings auditors.

LRCC's ETP staff has participated on the Energy Efficiency and Sustainable Energy (EESE) Board's Outreach & Education subcommittee. The subcommittee has been overseeing the development of a marketing plan that would increase demand for energy efficiency and sustainable energy services, as well as for trainings. Greater demand for energy efficiency services also generates more jobs in this field.

New partnerships have emerged due to ETP funding most notably contractors, who hold accounts with ETP's Rental / Hardware Store partner, that have learned of ETP equipment rental program and have requested information. We are hearing from contractors that their clients are asking them about improving their home's insulation during renovation and building projects. We are finding that contractors are welcoming assistance with learning the use of BPI methods, materials and equipment. Home construction contractors have stated weatherization has become a necessary part of the building trades and they need to have a handle on it.

7) Brochures, Announcements and Other Promotional Materials (See attachment.)

8) Invoicing Form and Budget vs. Actual Expenditures

(Included with invoicing.)