

**GREEN HOUSE GAS EMISSIONS REDUCTION FUND  
QUARTERLY PROGRESS REPORT  
LIGHTEC, INC.**

**December 1, 2009 through February 28, 2010**

- 1. Program Title:** Energy, Carbon Savings, and Education for Schools, Municipalities, and Business
  
- 2. Program Type:** Our program includes energy-efficiency project implementation and education. It falls into the following program categories:
  1. Energy Audits.
  
  8. Programs to improve the electric and thermal energy efficiency of new and existing residences and commercial buildings.
  
  10. Education, outreach and information programs that promote energy efficiency, conservation and demand response.
  
- 3. Summary of Work Completed During This Reporting Period:**

Task 1: Perform investment-grade energy audits in three projects, analyzing all major energy-using equipment and systems and provide engineered recommendations to clients.

Percentage Complete: 58%

- Project 1: The Town of Wolfeboro. Activities included:
  - Analyzed and completed work on the E-Quest schematic and design development simulations for the Public Safety Building, the DPW Garages, Library, and Ice Arena.
  - Investment Grade Audit Reports delivered as attachments in an email to the Town Manager.
  
- Project 2: Holy Cross Hall Condo Association. Activities included:
  - Reviewed the buildings energy bill history.
  - Analyzed and began work on the E-Quest schematic and design development simulations.
  - Began writing the Audit Report.
  
- Project 3: Town of Merrimack. Activities included:
  - Continued Level I Field Surveys of the Town buildings including Central Fire Department and branch stations, DPW Garage, Town Hall and Parks and Recreation.
  - Collected and reviewed the Town's past three years energy bill history.
  - Collected and reviewed the Towns electrical and mechanical systems and building envelope surveys for the Town Hall and Police Department.

- Began work on the E-Quest schematic and design development simulations of the Town Hall.

Task 2: Increase the energy efficiency of 13 educational facilities, 3 municipalities and 2 industrial corporations in New Hampshire.

Percentage Complete: 48%

**Educational Facilities**

- Continued work on obtaining Service & Installation Agreements from Derry, Dublin Consolidated, Francistown Elementary, Greenfield Elementary, Lancaster Elementary, Manchester Music School, Moultonborough, New England College, and White Mountain Regional High School.

**Municipalities**

- Project 1: Town of Wolfeboro Activities included:
  - Completed post installation M&V for the Wolfeboro Water Treatment.
  - Obtained Service & Installation Agreement from client for the Waste Water Treatment Plant.

**Industrial Corporations**

- Project 2: North Star Direct. Activities included:
  - Obtained Service & Installation Agreement from client.
  - Completed project engineering for high efficiency lighting and controls.
  - Completed pre-build M&V.
  - Completed project installation.
  - Completed post installation M&V.
- Project 3: Excalibur Shelving Motor Efficiency Project. Activities included:
  - Obtained Service & Installation Agreement from client.
  - Completed project engineering for high efficiency motor.
  - Completed pre-build M&V.
  - Completed project installation.

Table 1: Energy Efficiency Projects<sup>1</sup>

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<sup>1</sup> Task 2: Energy Efficiency Projects completed to date. The % of Carbon Reduction column reflects our programs full scope and is based on a target of 824.25 tons of carbon.

New Hampshire Client	Program Cost	GHGER Funds Requested	Program Participant Contribution	Estimated SBC Utility Rebate	Avg Monthly Demand Reduction (kW)	Annual Energy savings (kWh)	Tons of CO2 Reduced	% of Carbon Reduction Goal
<b>New Hampton School</b>	\$ 33,725	\$ 13,750	\$ 19,975	\$ -	14	104,607	51.69	6.3%
<b>Mount Saint Mary Academy</b>	\$ 49,108	\$ 11,000	\$ 27,148	\$ 10,960	27	56,545	27.94	3.4%
<b>Town of Wolfeboro</b>	\$ 51,770	\$ 12,000	\$ 39,770	\$ -	27	69,756	34.47	4.2%
<b>PCC Solutions Inc.</b>	\$ 184,028	\$ 28,711	\$ 110,227	\$ 45,090	84	538,953	266.29	32.3%
<b>Subtotal from Aug 19-Nov 30</b>	<b>\$ 318,630</b>	<b>\$ 65,461</b>	<b>\$ 197,119</b>	<b>\$ 56,050</b>	<b>152</b>	<b>769,861</b>	<b>380.38</b>	<b>46.1%</b>
<b>North Star Direct</b>	\$ 32,727	\$ 6,103	\$ 17,594	\$ 9,030	23	90,669	44.80	5.4%
<b>Excalibur</b>	\$ 5,281	\$ 3,436	\$ 1,845	\$ -	-	5,772	2.85	0.3%
<b>Subtotal from Dec 1-Feb 28</b>	<b>\$ 38,008</b>	<b>\$ 9,539</b>	<b>\$ 19,439</b>	<b>\$ 9,030</b>	<b>23</b>	<b>96,441</b>	<b>47.65</b>	<b>5.8%</b>
<b>Grand Total</b>	<b>\$ 356,639</b>	<b>\$ 75,000</b>	<b>\$ 216,559</b>	<b>\$ 65,080</b>	<b>175</b>	<b>866,302</b>	<b>428.03</b>	<b>51.9%</b>

Task 3: Provide education and training to students, faculty and maintenance employees regarding the energy-efficiency projects taking place in their buildings. The training will help to empower individuals so they can make similar efficiency improvements in their homes.

Percentage Complete: 30%

- Project Manager's conducted project reviews with maintenance staff as a result of the commissioning process, in all of the Task 2 projects completed. We included a binder of product specification sheets so that the energy savings can be sustained.
- Continued development of educational presentations, *Tips For Saving Energy at Home*, for both students and adults. The training presentations were developed as modules so that they can be easily modified for each client.

#### 4. Activities Anticipated for Next Reporting Period (March 1, 2010 – May 31, 2010):

Task 1: Perform investment-grade energy audits in three projects, analyzing all major energy-using equipment and systems and provide engineered recommendations to clients.

- Continue the Field Surveys of the Town of Merrimack and begin writing the fuel blind energy audit report/s.
- Deliver the Fuel Blind Energy audit Report for Holy Cross Hall to the Principals of both schools.

Task 2: Increase the energy efficiency of 13 educational facilities, 3 municipalities and 2 industrial corporations in New Hampshire

- Complete the energy efficiency installation and M&V for the Wolfeboro Waste Water Treatment Plant.

- Work on obtaining Service & Installation Agreements. Once obtained, conduct and/or review lighting audit and engineering specification/s; conduct pre-installation measurement and verification for the following projects:
  - Educational
    - White Mountain Regional High School
    - Lancaster Elementary School
    - New England College
    - Hillsboro-Deering Elementary
    - Derry schools
  - Municipal
    - TBD

Task 3: Provide education and training to students, faculty and maintenance employees regarding the energy-efficiency projects taking place in their buildings. The training will help to empower individuals so they can make similar efficiency improvements in their homes.

- Schedule presentations to the clients completed to date.

**5. Total Hours Worked and Jobs Created: 1517 man hours**

- LighTec, Inc. employees: 797 man hours
- Subcontractors: approximately 720 man hours
- LighTec, Inc. converted Eric Doberstein, outside technical sales person, from part time to fulltime status.

**6. Obstacles Encountered or Milestones Not Reached:**

- The ARRA grant process severely dampened our momentum. Sometimes we even found ourselves competing with Local Energy Committees. As towns pursued ARRA funding, often in collaboration with their school districts, they put efficiency projects on hold in hopes of receiving ARRA funding for them. Even after the announcement they do not want to move forward until the TRC contracts are published. This has prevented us from closing any town or school jobs this quarter. It seems imprudent to us to use GHGER funds on ARRA projects, therefore in cases where the customer did not stipulate the use of GHGERF dollars, in their EECBG proposal, we have removed them from our list and will pursue others.
- The Wadleigh Library directors decided not to pursue their energy efficiency project. LighTec Inc. will pursue an alternative project.
- We lost one of our project managers, as a side effect of the recovering economy. This has put some strain on operations as we conducted a job search for a replacement.

**7. Beyond the Contract:**

1. *Please report other activities, partnerships, funding or other synergies that have occurred as a result of this funding.*

- Developed a training module on lighting and energy audits with Wes Golem of Lakes Region Community College. (See attached .ppt File.)
- Met with Jim Monahan of the Dupont Group, who is representing the GHGER program for the Retail Merchants Association on potentially partnering on the implementation stage of their work.
- Met with Bob Sheppard of Clean Air Cool Planet regarding potentially partnering on the implementation stage of their work.
- Went to Washington D.C. and met with our congressional delegation to encourage passage of the climate change bill with Clean Air Cool Planet and the Environmental Defense Fund. This was under the umbrella of "Business Advocacy Day for Jobs, Climate & New Energy Leadership".

8 *If applicable, please include brochures, workshop announcements, or other materials developed to promote your grant activities. Attachments (and other documentation) are appreciated.*

- Monthly revisions to web site [www.lightec.net](http://www.lightec.net) to reflect updated grant information, programs, other organization seminars, attendance to various in and out of state conferences/meetings that focus on energy efficiency, ARRA, GHGRF, government policy, etc.
- Guest on NH Today with Jack Heath, a radio show on 107.7FM, for approximately 15 minutes two times per month discussing energy issues.  
<http://www.jackheathradio.com/about.html>
- Ran a radio commercial during the month of February, Monday through Saturday, 6:00 a.m. to 6:00 p.m., on 107.7 FM-WTPL-The Pulse. (See attached .mp3 File.)

9 *Budget vs. Actual Expenditures: (if you have included this with your invoicing, there is no need to repeat for the quarterly report.) Using the budget you submitted for the final approved grant proposal, please add a column and provide actual expenditures as well as match dollars for this quarter. (Save this worksheet for future reporting as we will want to see your quarterly expenditures as the project continues.)*

- See previously submitted invoices.

Date: \_\_\_\_\_  
Initials: \_\_\_\_\_