

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

March 1, 2010 through May 31, 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: 78%

- Project 1: The Town of Wolfeboro. Activities included:
 - Complete.

- Project 2: Holy Cross Hall Condo Association. Activities included:
 - Completed the E-Quest schematic and design development simulations including modeling energy-savings measures and computing potential energy and cost savings.

 - Continued writing and formatting the Energy Audit Report.

- Project 3: Town of Merrimack. Activities included:
 - Completed ASHRAE Level I Analysis at the Town Hall building and presented preliminary findings to the Town. The Town agreed to pursue an ASHRAE Level II audit of the Town Hall (East and West buildings), Central Fire Station and the DPW Garage.

 - Continued to collect and analyze the Town Hall buildings (east and west) operating and energy usage field data.

 - Continued E-Quest schematic and design development simulations to determine the best energy efficiency measures that will cost-effectively reduce energy and carbon while increasing comfort and productivity.

- Began to identify and introduce various installation subcontractors to the building in order to generate reasonable cost estimates and develop an installation timeline.

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

Percentage Complete: 52%

Educational Facilities

- Continued work on obtaining Service & Installation Agreements from New England College, Manchester Community Music School, Lancaster Elementary, White Mountain Regional High School and the Derry School District.

Municipalities

- Continued work on obtaining Service & Installation Agreements from the Town of Moultonborough and The Town of Merrimack
- Project 1: Town of Wolfeboro Activities included:
 - Wolfeboro Waste Water Treatment:
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement and verification (M&V).
 - Completed project installation.
 - Completed pre & post-build M&V (report attached).

Industrial Corporations

- Task Complete; nothing new to report.
- M&V report for Northstar Direct is attached.

Table 1: Energy Efficiency Projects Completed ¹

New Hampshire Client	Program Cost	GHGER Funds Requested	Program Participant Contribution	SBC Utility Rebate	Avg Monthly Demand Reduction (kW)	Annual Energy savings (kWh)	Tons of CO2 Reduced	% of Carbon Reduction Goal
<i>Educational</i>								
New Hampton School	\$33,725	\$13,750	\$19,975	-	14	104,607	51.69	6.30%
Mount Saint Mary Academy	\$49,108	\$11,000	\$27,148	\$10,960	27	56,545	27.94	3.40%
<i>Municipal</i>								
Town of Wolfeboro	\$51,770	\$12,000	\$39,770	-	27	69,756	34.47	4.20%
Town of Wolfeboro Waste Water	\$9,367	\$3,300	\$5,294	-	3	6,926	3.41	0.40%
<i>Industrial</i>								
PCC Solutions Inc.	\$184,028	\$28,711	\$110,227	\$45,090	84	538,953	266.29	32.30%
North Star Direct	\$32,727	\$6,103	\$17,594	\$9,030	23	90,669	44.8	5.40%
Excalibur	\$5,281	\$3,436	\$1,845	-	-	5,772	2.85	0.30%
Grand Total	\$366,006	\$78,300	\$221,853	\$65,080	178	\$873,228	431.45	52.30%

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: 40%

- 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.
- Met with the Town of Wolfeboro to discuss training and per the Town Manager’s request provided a copy of the presentation to the Town Manager so that he could determine interest in workshop.

¹ 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.

- Met with the administrators of Saint Mary's Academy and the Manchester Community Music School who decided that in lieu of a formal workshop, they would like an informational display to be housed in the lobby display case.

Other Work Completed:

- On behalf of Carbon Solutions New England (CSNE), LighTec requested and received the "Consent for Release of Cost and Energy Usage Data" from most customers.
- At the request of CSNE, collected data, on a project by project basis, including energy saved, carbon reduced, program costs, project costs, man hours worked by task (i.e. auditing, subcontracted labor, etc.), material cost, and materials purchased from NH vendors. Created a form to present this information and provided a sample project to CSNE for approval. (This sample is attached.)
- Tracked and reported program progress including this Quarterly Report.

4. Activities Anticipated for Next Reporting Period (June 1, 2010 – August 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 auditing the Town of Merrimack, including the Central Fire Station, and DPW buildings and begin writing the fuel blind energy audit report/s. Finalize and deliver the Energy Audit Report for the Town Hall buildings.
- Complete and Deliver the Energy Audit Report to Holy Cross Hall.

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

- 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
 - Manchester Community Music School: Contract expected by June 30, 2010.
 - New England College (four buildings): Contract expected by June 30, 2010.
 - White Mountain Regional High School: We expect this project to move forward once the ARRA process is finalized.
 - Municipal
 - Town of Moultonborough: LighTec, Inc has a contract (signed June 3, 2010) with the Town of Moultonborough to conduct a fuel-blind, design/build analysis of its building(s).
 - Town of Merrimack: LighTec is developing an energy-efficiency project within the Town of Merrimack in tandem with conducting the energy

audits described in Task One. The Town received an ARRA grant to upgrade their furnaces' to energy-efficient gas-fired boilers. We are leveraging RGGI, ARRA and Utility incentives to provide the Town with a comprehensive, design/build, energy savings project that will address several energy using systems within the building(s) with a positive cash flow. We expect an installation contract by July 31, 2010.

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.

- Continue attempts to schedule presentations.
- Develop display case informational posters for the Saint Mary's Academy and Manchester Community Music School shared lobby. In addition to developing posters detailing the specifics of the schools energy saving project we will also provide "Cut the CARBON" take home materials developed by the CORE utilities in partnership with the New Hampshire State Library.

Other Work:

- Deliver compiled project information to CSNE.
- Continue to track and report on program progress.

5. Total Hours Worked and Jobs Created: 573.5 man hours

- LighTec, Inc. employees: 556 man hours
- Subcontractors: approximately 17.5 man hours
- LighTec added one PTE for administrative support.
- LighTec has engaged Computer Troubleshooters, located in Merrimack, NH, for IT services on an "as needed" basis.

6. Obstacles Encountered or Milestones Not Reached:

- In our previous quarterly report, LighTec identified the Hillsboro-Deering Elementary School as a potential RGGI project. We were able to sell this project without utilizing any RGGI funding. This project is projected to save 99,097 kWh annually and will remove 49 tons of CO₂ from the atmosphere. We will develop another schools project in its place.
- The ARRA grant process continues to dampen our momentum. Projects continue to be delayed as towns and school districts wait for funding to be released. Further delays may result as the ARRA recipients realize that projects are required to be competitively bid as there is a time element involved in writing requests for proposals.
- Eric Doberstein, an outside technical sales person, has voluntarily and amicably left LighTec's employ.
- While we understand the importance of completing all tasks under this grant, our activities involved with Task 3, to *provide education and training to students, faculty and maintenance*

employees regarding the energy-efficiency projects taking place in their buildings, have been stalled due to the departure of a key employee, and increased focus on project development, and an intensive concentration of energy on our response to the second GHGERF request for proposal. In the coming quarter, we will renew our efforts on progressing with this task.

7. Beyond the Contract:

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

- At the invitation of Wes Golem from the Lakes Region Community College, Jim Grady developed and taught a course on energy-efficient lighting technology and conducting commercial lighting energy audits. (The presentation was included in last quarter's update.)
- Exhibited and spoke at the New Hampshire Restaurant and Lodging Associations New England Eco-Hospitality Expo on May 25, 2010 at the Grappone Conference Center in Concord.
- Exhibited at Mount Washington Valley's 12th Annual Business to Business Expo on May 24th, 2010 at the Omni Mt. Washington Hotel & Resort.

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

- 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>

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: _____