

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

December 1, 2010 through February 28, 2011

- 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.

Definitions:

Facility - Any free standing building on a lot or campus that consumes energy.

Project - A facility or group of facilities with which LighTec has an energy-services contract. A project can consist of one or many facilities.

3. Summary of Work Completed During This Reporting Period (Dec. 1, 2010 – Feb. 28, 2011):

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: 98%

- Project 1: The Town of Wolfeboro. Activities included:
 - Complete.
- Project 2: Holy Cross Hall Condo Association. Activities included:
 - Complete.
- Project 3: Town of Merrimack. Activities included:
 - Delivered the Merrimack Town Hall Energy Audit Report, final draft.

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

Percentage Complete: **89.7%**

As of February 28, 2011 LighTec has secured contracts for 19 projects that include 50 facilities. Out of these 19 projects, 13 are complete and represent a combined annual energy savings of 1,362,994 kWh and reduced 739.53 metric tons of CO₂ emissions from the atmosphere.

Educational Facilities

- To date, LighTec has secured contracts for eleven (11) projects that include eighteen (18) educational facilities. Out of these projects, seven are complete and represent a combined annual energy savings of 621,319 kWh and reduced 373.11 tons of CO₂ emissions from the atmosphere. Task details for each project are provided below.
 - Project E-1: New Hampton School (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 108,141 kWh
 - ❖ CO₂ Reduced: 51.69 tons
 - Project E-2: Mount Saint Mary Academy (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 60,332 kWh
 - ❖ CO₂ Reduced: 27.94 tons
 - Project E-3: Newfields Elementary School (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 44,101 kWh
 - ❖ CO₂ Reduced: 22.09 tons
 - Project E-4: New England College (four facilities): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 90,256 kWh
 - ❖ CO₂ Reduced: 43.4 tons
 - Project E-5: Manchester Community Music School (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 33,450 kWh
 - ❖ CO₂ Reduced: 16.49 tons

- Project E-6: Litchfield Middle School (one facility): Lighting and Lighting Controls Upgrade and HVAC Controls Upgrade.
 - Project Complete. (M&V Report attached.)
 - ❖ Annual Energy Savings: 166,830 kWh; 1,318 MMBTU
 - ❖ CO₂ Reduced: 152.24 tons

- Project E-7: White Mountains Regional High School (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete. (M&V Report attached.)
 - ❖ Annual Energy Savings: 120,209 kWh
 - ❖ CO₂ Reduced: 59.26 tons

- ❖ Project E-8: Hollis/Brookline School District (five facilities): Lighting and Lighting Controls Upgrade. Activities included:
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement for lighting upgrade.
 - Began implementing the efficiency upgrades.

- ❖ Project E-9: Chesterfield Elementary (one facility): Lighting and Lighting Controls Upgrade. Activities included:
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement for lighting upgrade.

- ❖ Project E-10: Rivendell Academy Middle School (one facility): Lighting and Lighting Controls. Activities included:
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement for lighting upgrade.

- ❖ Project E-11: Wells Memorial Elementary School (one facility): Lighting and Lighting Controls. Activities included:
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement for lighting upgrade.

Municipal Facilities

- To date, LighTec has secured contracts for five (5) projects that include twenty-eight (28) town-owned facilities. Out of these, three projects are complete and represent combined annual energy savings of 106,281 kWh and reduced 52.48 tons of CO₂ emissions from the atmosphere. Task details for each project are provided below.
 - Project M-1: Town of Wolfeboro (six facilities): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 76,682 kWh
 - ❖ CO₂ Reduced: 37.88 tons
 - Project M-2: Town of Dunbarton (one facility): Lighting and Lighting Control Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 6,254 kWh
 - ❖ CO₂ Reduced: 3.1 tons
 - Project M-3: Town of Moultonborough (one facility): Completed an ASHRAE level III investment grade energy audit of the town hall. Activities included:
 - Presented the findings of the *Town Hall Energy Audit* to the Board of Selectmen.
 - Obtained the Service & Installation Agreement from client.
 - Gathered and delivered product specification sheets to the client.
 - Project M-4: Town of Tamworth (11 facilities)
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement and post-build verification for lighting upgrade.
 - Completed the lighting efficiency upgrades.
 - ❖ Annual Energy Savings: 25,345kWh
 - ❖ CO₂ Reduced: 11.5 tons
 - Project M-5: Town of Hollis (nine facilities)
 - Obtained the Service & Installation Agreement from client.
 - Completed project engineering for high efficiency lighting and controls.
 - Completed pre-build measurement for lighting upgrade.
 - Began implementing the efficiency upgrades.

Industrial Corporations

- LightTec secured contracts for three projects that included four facilities. All of these projects are complete and represent a combined annual energy savings of 635,394 kWh and reduced 313.94 tons of CO₂ emissions from the atmosphere. Task details for each project are provided below.
 - Project I-1: PCC Solutions (two facilities): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 538,953 kWh
 - ❖ CO₂ Reduced: 266.29 tons
 - Project I-2: North Star Direct (one facility): Lighting and Lighting Controls Upgrade.
 - Project Complete.
 - ❖ Annual Energy Savings: 90,669 kWh
 - ❖ CO₂ Reduced: 44.8 tons
 - Project I-3: Excalibur (one facility): Motor Controller Installation
 - Project Complete but under evaluation
 - ❖ Annual Energy Savings: 5,772 kWh
 - ❖ CO₂ Reduced: 2.85 tons

Table 1: Task Two Energy Efficiency Projects Completed to Date¹

Project #	New Hampshire Client	Program Cost	GHGER Funds Requested	Program Participant Contribution	SBC Utility Rebate	EECBG Funding	Peak Monthly Demand Reduction (kW)	Annual Energy savings (kWh)	Metric Tons of CO ₂ Reduced	% of Carbon Reduction Goal
Educational										
E-1	New Hampton School	\$33,725	\$13,750	\$19,975	\$0	\$0	15	108,141	51.69	6.3%
E-2	Mount Saint Mary Academy	\$49,108	\$11,000	\$34,093	\$10,960	\$0	29	60,332	27.94	3.4%
E-3	Newfields Elementary School	\$31,095	\$5,154	\$11,665	\$14,276	\$0	18	42,101	22.09	2.7%
E-4	New England College	\$88,435	\$17,302	\$51,440	\$16,925	\$0	28	90,256	43.4	5.3%
E-5	Manchester Community Music School	\$42,743	\$5,929	\$15,522	\$19,607	\$0	11	33,450	16.49	2.0%
E-6	Litchfield Middle School	\$148,772	\$44,007	\$99,551	\$19,105	\$0	44	166,830	152.24	18.5%
E-7	WMRHS	\$127,401	\$20,519	\$162	\$21,720	\$85,000	47	120,209	59.26	7.2%
Municipal										
M-1	Town of Wolfeboro	\$63,088	\$15,458	\$47,630	\$0	\$0	30	76,682	37.88	4.6%
M-2	Town of Dunbarton Town Hall	\$14,044	\$2,715	\$192	\$4,087	\$7,050	3	6,254	3.1	0.4%
M-3	Town of Tamworth	\$43,818	\$3,114	\$3,618	\$17,468	\$19,618	17	23,345	11.5	1.4%
Industrial										
I-1	PCC Solutions Inc.	\$184,028	\$28,711	\$116,496	\$45,090	\$0	84	538,953	266.29	32.3%
I-2	North Star Direct	\$32,727	\$5,087	\$19,445	\$9,030	\$0	23	90,669	44.8	5.4%
I-3	Excalibur	\$5,281	\$3,436	\$1,845	-	\$0	-	5,772	2.85	0.3%
Grand Total		\$864,265	\$176,182	\$421,634	\$178,268	\$111,668		1,362,994	739.53	89.7%

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

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: 45%

- 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 making phone calls and sending emails to Clients in order to determine an action plan for the education component of their projects.
 - As of February 28th the following client's have indicated their interest in pursuing one or more of the education options:
 - New Hampton School
 - Mount Saint Mary Academy
 - The Manchester Community Music School
 - Town of Wolfeboro
 - Town of Dunbarton
 - Town of Moultonborough
 - Town of Hollis
 - To date we have received no response from the following clients:
 - PCC Solutions
 - Northstar Direct
 - Town of Tamworth
- Began collecting and organizing project data in order to prepare project specific presentations, newsletters and posters.
- Designed an education poster template.

4. Activities Anticipated for Next Reporting Period (March 1, 2011 – April 30, 2011):

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

- Finalize the *Merrimack Town Hall Energy Audit Report*.

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 from the Town of Brookline and the Brookline School District (expected March 1st). Once obtained: conduct and/or review audit and engineering specification/s; conduct pre-installation measurement; install the efficiency upgrades; and conduct post-installation verification.
- Complete efficiency upgrades at the following educational facilities: Chesterfield Elementary School; Hollis Schools & Hollis/Brookline Co-op schools ; Rivendell Academy and Wells Memorial School. .
- Complete the installation of the energy efficiency measures in the Town of Hollis and as defined in the ASHRAE Level III Design/Build Energy Audit for the Moultonborough Town Hall. .

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 contact clients via phone and email to determine interest in receiving educational material.
- For Clients that would like to pursue the educational offering, determine what, and/or revise, customize and deliver educational materials/workshops.

5. Total Hours Worked and Jobs Created: 798 man hours

- LighTec, Inc. employees: 490 man hours
- Subcontractors: approximately 308 man hours
- LighTec continues to engage Computer Troubleshooters, located in Merrimack, NH, for IT services on an “as needed” basis.
- LighTec hired 3 interns, one from Lakes Region Community College, and employs an additional 6 full time and 4 part time people.

6. Obstacles Encountered or Milestones Not Reached:

- Regarding Task 3, Education: We had a slow ramp up for the educational portions of this grant. In part this is due to slow customer response, but it is also due to competing priorities within LighTec. In February, LighTec hired, Dave Warren, a former Repower America employee, who has taken the lead on these educational efforts. Dave has done a fantastic job of moving these efforts forward. LighTec hopes to have Task 3 complete by April 30th, but it is possible that aspects of this task, such as in-person presentations, will take place after our grant period ends.
- The problems encountered last quarter with regard to ARRA projects using RGGI funding as well seems to have smoothed over but it still takes an inordinate amount of time to get paid for projects 50% complete or 100% complete.

7. Beyond the Contract:

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

- Building RGGI page for launch on our website.
- At PSNH’s request, LighTec provided PSNH a list of our clients that leveraged both SBC (small business) and RGGI funds to implement energy-efficiency projects.
- During this reporting period and beyond, Jim Grady has taken many political actions in support of RGGI. Here is a summary of these actions.
 - In collaboration with many parties, Jim Grady wrote a Pro-RGGI opinion editorial, titled “New Hampshire's RGGI Law: No Apologies Required”, that was published in the New Hampshire Business Review, The Portsmouth Herald, the Keene Sentinel, the Foster Daily Democrat and the Concord Monitor. This op-ed piece led to an interview with Christa Marshal of ClimateWire, a publication based in Washington D.C. (Concord Monitor article attached)

- In coordination with Conservation NH, Jim Grady sent an email to all of LighTec client's, whose energy-efficiency projects were made possible through the GHGERF program, requesting they write to the Senate leadership.
- Posted Senator Shaheen's PRESS RELEASE: Shaheen Calls for Energy Efficiency at Alliance to Save Energy Event to the LighTec Website and sent an email to Sarah Holmes, one of the Senator's aids, to share LighTec's views of RGGI.
- RGGI funds have opened many doors for opportunities that, otherwise, may not have happened. LighTec was able to expand its services by installing an energy management system at Litchfield Middle School because of RGGI funding. The school would never have been able to install this type of system without this financial assistance in place. They are now able to control their heating and cooling systems, as well as regulating the fresh air intake, while reducing their energy consumption. LighTec has also signed a contract with the Town of Moultonborough to install a similar system. Because of the expansion of our business, thanks to RGGI, we have been able to increase our staff by bringing on three interns. One of whom is from the Energy Technician course taught at Lakes Region Community College.

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

- Created a presentation for the Holderness School's Environmental AP class. The presentation included information on where New Hampshire gets its energy and how energy can be saved in the home and office. The presentation also describes how the NH RGGI law works.
- Created a presentation on lighting efficiency for the New Hampshire Home Show.

9. *Budget vs Actual Expenditures: if you have included this with your invoicing, there is no need to repeat for the quarterly report.)*

- See previously submitted invoices.

Date: _____
 Initials: _____