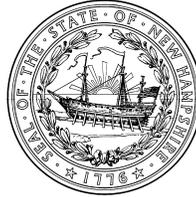


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**TO: EESE Board**  
**FROM: Jack Ruderman and Barbara Bernstein**  
**DATE: May 14, 2010**  
**RE: Update on Clean Energy Funds**

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### **Greenhouse Gas Emissions Reduction Fund (RGGI Fund)**

- Funds awarded: 2009 RFP resulted in \$17,661,335.00 for 30 programs/projects; \$1.2 million for StayWarmNH winter 2008-9
- **Current Balance: \$640,270**
- **Expected funds for remainder of 2010: \$9-\$10 million**
- **Planned Uses:** Next round RFP has been issued. Initial awards to be announced in June. Three categories: Programs for large energy users; affordable housing; continuation of successful programs such as revolving loan funds.

#### **Results to date:**

##### ***Construction Institute of New Hampshire - \$178,169 (two years)***

**Goal:** CINH, the education arm of the Home Builders and Remodelers Association of New Hampshire, will provide training to building professionals and educate homeowners, buyers and occupants.

- New program manager hired.
- 4 training sessions completed; more than 171 builders, remodelers and other building professionals have completed courses in green building techniques.
- Website upgraded; monthly newsletter sent to 3,000 contractors.

##### ***Dept. of Resources and Economic Development \$172,000 (two years)***

**Goal:** DRED will partner with Lakes Region Community College (LRCC) to develop a new training program to help develop a skilled labor force for energy efficiency improvements to buildings.

- 84 individuals completed the new Building Performance Institute (BPI) Building Analyst Class (a 5 day energy auditor training course offered at community colleges around the state.) Additional classes have been scheduled.
- 62 went on to earn BPI Building Analyst Certification. Many have used this training to enhance their business opportunities; nine started their own businesses or expanded into weatherization business. 23 used their new skill set to expand their business services.
- 

##### ***NH Business Finance Authority - \$2,000,000 (one year)***

**Goal:** BFA will establish a revolving loan fund to help businesses finance energy efficiency improvements.

- \$750,000 agreement with Foss Manufacturing (320 employees) in Hampton completed.
- \$336,000 loan with Vitex Extrusion (80 employees) in Franklin.
- Waiting for new owner of the Gorham paper mill (240 employees) to be announced to finalize the \$502,300 methane recovery system loan with the local solid waste district.
- Other companies under consideration are Structural in Claremont, the Capitol Center in Concord, and Janco in Rollinsford.

***Plymouth Area Renewable Energy Initiative - \$99,250 (one year)***

**Goal:** Plymouth Area Renewable Energy Initiative (PAREI) will expand its successful “Energy Raiser” programs to provide homeowners with the technical information and volunteer support to install solar hot water systems and to weatherize homes. Ten homes will be weatherized and ten will have solar hot water systems installed.

- PAREI found that the first order of business was to train staff, contractors, and volunteers on weatherization services skill development. 9 were trained – 4 became BPI certified.
- PAREI has completed: 7 of the 10 solar hot water installations; 5 of 10 weatherization projects; 12 solar water heating information sessions; and 5 on-site weatherization trainings.
- PAREI has completed 33 grant subsidized energy audits. Energy saving measures have been completed on 2/3 of those audited residences

***Retail Merchants Association - \$1,372,028 (one year)***

**Goal:** RMA and its partners – the Jordan Institute, the Dupont Group, White Birch Communications, Ocean Bank et al – will create an energy efficiency program for RMA members and other similarly situated businesses.

- RMANH’s Energy Efficiency Program has enrolled 25 businesses into its energy retrofit demonstration project and completed energy evaluations for all enrolled businesses. Nine of ten Phase 2 audits have been scheduled. Their first demonstration energy upgrade is expected to begin in June.
- 5 additional Phase 1 assessments are being offered; an additional 15 Phase 2 audits are available.
- Statewide participants include a wide range of retailers ranging from appliance and furniture stores, to auto dealers and professional office space owners.

***Southern NH Resource Cons. & Dev. Area Council - \$87,000 (one year)***

**Goal:** Known as the New Hampshire Farm Energy Initiative, this program will provide up to 10 workshops on energy efficiency to agricultural business owners and operators. In addition, the initiative will provide comprehensive energy audits to 25 farms.

- Program design complete, regional workshops held, energy audits of 25 farms in process.

***TRC, Inc. - \$500,000 (two years)***

**Goal:** TRC will launch a benchmarking initiative to measure the energy performance of 250 public K-12 schools.

- 18 districts enrolled in benchmarking program; 51 schools benchmarked.
- Total square feet enrolled and amount benchmarked:
  - 3,875,888 Sq.Ft. enrolled; 2,554,430 Sq.Ft. benchmarked
- Annual Utility bill summary (kWh, Btus, and/or \$) of schools enrolled: 15,600,057 kWh in system, \$4,693,121 of total annual utility costs
- Students affected: 16,250
- Report cards to be completed by May 14: twenty-five

***UNH – Carbon Challenge - \$813,402 (two years)***

**Goal:** NHCC will create a residential energy portal (website) as a central source of sound information on energy efficiency programs, sustainable energy technologies, and available resources and incentives such as rebates and tax incentives. NHCC will provide direct assistance to communities through public presentations, guidance on best practices, and progress reports.

- The website [myenergyplan.net](http://myenergyplan.net) was released in April. It includes the [Energy Project Connector](#)<sup>TM</sup> (an extensive list of local professionals and potential funding sources to assist residents with energy efficiency projects) as well as the New England Carbon Estimator<sup>TM</sup> that suggests simple lifestyle substitutions to reduce energy consumption.
- 9 regional workshops (250 attendees) conducted by trained energy auditors in collaboration with a local workshop organizer. Workshop locations included New London, Concord, Dover, Sanbornton, Lebanon, Rye, Grafton, Plymouth and Atkinson.

***UNH - Carbon Solutions New England - \$139,000 (one year)***

**Goal:** CSNE will track, analyze and report on the results of projects funded by the GHGERF.

- CSNE is completing a semi-annual report quantifying energy, environmental, and economic benefits of RGGI funded projects. Report to be issued in June.

***Fraser NH - \$470,000***

**Goal:** The Fraser paper mill in Gorham will utilize reuse of hot water, hot air and condensate to reduce usage of #6 oil by 729,000 gallons per year through 5 specific projects.

- 100% complete as of May 12.
- Cost savings: \$800,000 per year.
- Greenhouse gas reductions: 8600 metric tons per year.

***Propell Energy - \$49,885***

**Goal:** Propell will install a high efficiency wood pellet boiler in New England College's Science Building.

- Boiler ordered and design work completed. Installation to be completed in the upcoming two months. The wood pellets will replace heating oil and will be carbon neutral.

***Stonyfield Farm - \$148,927***

**Goal:** Grant funds will be used to install a variety of measures that will reduce energy consumption.

- Specification Development is 100% complete as are HVAC system modifications. All industrial process modifications are in process, however, delays in ordered components will require that Stonyfield receive a contract extension from June 30, 2010 into FY 11.

***Clean Air – Cool Planet - \$400,000***

**Goal:** CA-CP will provide 24 to 48 NH towns with baseline energy information, specific recommendations and on-going support necessary to renovate their most inefficient municipal buildings.

- The CA-CP [New Hampshire Municipal Energy Assistance Program](#) (NHMEAP) is working with 48 NH communities to compile baseline greenhouse gas emissions inventories, allowing decision makers to prioritize potential emissions reductions measures.
- Of the 35 NHMEAP towns that made EECBG applications, 25 were awarded some EECBG funds to implement energy conservation projects.

***NH Electric Utilities - \$7,646,020***

**Goal:** National Grid, NH Electric Co-op, PSNH, and Unitil will expand the CORE Efficiency Programs by increasing the budget for current programs and adding new program elements.

- These programs have resulted in annual CO2 reduction of 4,606 metric tons.
- Energy Star Appliance Program – a turn-in program for clothes washers, room air conditioners, 2<sup>nd</sup> refrigerators, and freezers.
- Lighting – rebates for customers purchasing 23,353 energy efficient lighting products.
- Fuel Neutral Multi-Family Program – 42 homes weatherized to date.
- Home Energy Assistance Program (weatherization in low income homes) – 345 low income homes/apartments to date.

- Small Business Retrofit – 52 projects completed.
- Large Business Retrofit – 12 projects completed.
- Energy Code Trainings – 195 attendees as of February, 2010.
- Watt meters to measure power use of household appliances distributed to all town libraries.

***North Country RC & D - \$43,850***

**Goal:** North Country RC & D will conduct outreach to NH communities and organizations seeking to pursue district heat/power biomass systems.

- Outreach in progress.

***Crotched Mountain Rehabilitation Facility - \$176,53***

**Goal:** Crotched Mountain, located in Greenfield, will upgrade the heating distribution and control system of a building whose occupants are mainly low-income.

- Project 100% complete November 2009.
- Annual reductions in oil usage of 25,000 gallons and 250 tons per year of CO<sub>2</sub>.
- Cost savings: \$60,000 annually.

***Dartmouth College - \$330,936***

**Goal:** Dartmouth will implement a Campus Energy and Sustainability Management system to achieve improved building energy performance, campus smart-grid technology, and innovative energy feedback systems.

- The college Sustainability Office is working with multiple stakeholder groups and Rockwell Software on the development of extensive web-based interface to track, report, and optimize building energy performance.
- It is estimated the program will reduce campus energy use by 15% or approximately 9,000 mWH and 750,000 gallons of #6 fuel oil annually.

***Enfield Shaker Museum - \$51,354***

**Goal:** The Great Stone Dwelling will be weatherized and retrofitted with energy efficient measures. The Museum will also create an educational exhibit on saving energy and reducing greenhouse gas emissions.

- The original project plan is being modified. Work on contract amendment underway.

***NH Institute of Art (Manchester) - \$146,060***

**Goal:** geothermal heating and cooling system, premium building envelope measures, and a vegetated roof.

- Project complete – waiting for final report.

***NH Community Development Finance Authority - \$1,500,000***

**Goal:** CDFFA will establish a revolving loan fund to finance energy improvements in municipal buildings.

- Loan to City of Dover for a new ice skating arena chiller approved.
- 10 additional municipalities currently in discussions.

***LighTec, Inc. - \$316,000***

**Goal:** LighTec, a NH energy services provider, will install high efficiency lighting systems in eighteen schools, town buildings and small businesses across the state.

- 6 energy efficiency projects complete, 12 in process.

***SAU 46/Merrimack Valley School District - \$83,685***

**Goal:** SAU 46 will connect its office building to an existing, central biomass plant that is already providing heat to three nearby schools, and will upgrade lighting fixtures, compressors, air handlers and controls to reduce the use of electricity and natural gas.

- Project 100% complete November 2009.
- Savings of \$3,000 in electrical costs per year, reduction of natural gas consumption by about 35%, and reduction of CO<sub>2</sub> emissions of 43,805 pounds per year.

<i>Other Municipal Projects</i>	<i>Grant Amount</i>	<i>Project</i>	<i>Energy Savings</i>	<i>Status</i>
Town of Fremont	\$8,000	Insulate safety complex	Annual reduction of 14,000 lbs. of CO <sub>2</sub> & reduced annual energy costs of \$7,587.	100% complete
Town of Gorham	\$26,000	New fire station heating system	New pellet boiler reduces fuel use 30 -50 %. Uses renewable fuel. Reduces CO <sub>2</sub> by as much as 64,960 lbs./yr.	100% complete
Town of Hancock	\$8,500	Energy audits	energy retrofits projects in next phase.	100% complete
Town of Jaffrey	\$16,250	Energy audits	energy retrofit projects in next phase	In process
City of Rochester	\$394,000	Wastewater treatment project	Annual reduction of 513,000 lbs. of CO <sub>2</sub> and reduce annual operating costs of \$45,200.	In process
Town of Temple	\$332,100	1. energy-saving retrofits/ 2. <a href="#">eco-educational website</a> 3. weatherized 4 low income homes	Estimated annual reduction of 530,000 lbs. of CO <sub>2</sub> .	In process
Town of Walpole	\$138,345	Comprehensive energy retrofits	Estimated annual reduction of 107,400 lbs. CO <sub>2</sub> and 70% reduction of energy costs.	In process
Town of Warner	\$11,150	Energy audits	energy retrofits in next phase	100% complete

### **Renewable Energy Fund (RPS Fund)**

- **Current Balance: \$2.6 million.**
- **Expected funds for 2010: less than \$1 million.**
- **Planned Uses:**
  - \$500,000 set aside for residential Solar Hot water rebate program to be matched with \$500,000 in ARRA funds from Office of Energy and Planning (OEP). Program launched April 21, 2010.
  - Developing rebate program for residential wood pellet furnaces/boilers with \$500,000 in ARRA funding from OEP.
  - Developing commercial rebate program for solar electric installations. Minimum of \$1 million to be made available. Program will launch this summer.

- **Ongoing Rebate Programs:**

- *Residential renewable energy rebate program for solar electric and small wind*

- \$1.34 million disbursed to 237 homeowners
- 63 additional applications requesting \$372,000 in process.
- Combined capacity of all installations - .872 MW
- Avg. cost to state per watt installed: \$1.96
  - Equates to \$1.96 million for 1 MW
- **Total cost of all installations requesting funds: \$6.5 million**
- **Funds leveraged: \$4.8 million**
- **Electricians and alternative energy businesses participating in rebate program: 129**