

GREENHOUSE GAS EMISSIONS REDUCTION FUND
Quarterly Progress Report Form

The first quarter grant report is due November 30, 2009.

1. Program Title *(as displayed in your proposal)*

Reducing Residential Energy Consumption through the New Hampshire Carbon Challenge

2. Program Type *(as listed in your proposal)*

1. Education, outreach and information programs that promote energy efficiency, conservation, and demand response.

2. Demand response programs to reduce New Hampshire's peak electric load.

3. Summary of work completed during this reporting period **July 15, 2009 – September 30, 2009**. *Please refer to Exhibits A & B of your contract. Exhibit A outlines the tasks that you agreed to complete. Your report should explain the work done on each task to date and the percentage completion.*

- *Provide a summary of activities relevant to this grant.*
- *Discuss any benefit your activities may have had for low income residents.*
- *Note any problems or delays.*
- *Note any deviation from the work-plan. **If you have a deviation from the plan, you should contact us before proceeding.***
- *Attachments and other documentation are appreciated.*

Summary of First Quarter Activities Relevant to NH Carbon Challenge GHGEF grant

Over the next two years, the New England Carbon Challenge (a joint initiative of UNH and Clean Air-Cool Planet) and the New Hampshire Sustainable Energy Association will collaborate and develop a suite of four new web-based tools that will assist NH households in using energy more efficiently and transitioning to sustainable energy systems. A third partner, UNH Cooperative Extension, joined us recently and will be supporting our efforts through its Energy Answers program. Energy Answers volunteers will be serving on our residential advisory group and lending research assistance in compiling key datasets integral to these tools. Once the tools are released, Cooperative Extension will publicize and promote these tools through their extensive programmatic activities, including low income sector outreach.

This report summarizes our progress over the first three months of the grant period and highlights major milestones achieved.

I. First Year Goals Established Under This Contract (Exhibit A) (07/15/09 – 07/15/10)

1. Assemble a voluntary advisory group of residents and representatives that will provide guidance on the development of all web-based tools. (3 months from Governor and Council (G&C) approval)

Status: 100% Complete

2. Launch an Incentives and Vendors Index, a searchable web-based tool that will provide each homeowner with a customized report on which rebates and incentives are available, as well as a detailed list of energy efficiency and sustainable energy technology contractors. NHCC will develop procedures to ensure that the index is kept current. (9 months from G&C approval)

Status: 60% Complete

3. Extend the capabilities of the New England Carbon Estimator so that households can see not only the resulting carbon reduction from the actions they have completed, but also the carbon reduction from what they pledged to do. (12 months from G&C approval)

Status: 15% Complete

4. Send all Challenge takers a customized "next steps" guide that will link the actions they have indicated they wanted to take to available resources and incentives for energy efficiency and renewable energy projects. (12 months from G&C approval)

Status: 0% Complete

II. Technical Development Progress: We have focused our initial activities on the development of our first two web-based tools: the Incentive and Vendor Index and the enhanced New England Carbon Estimator. These tools have a scheduled release date of April 2010 and July 2010, respectively.

Significant milestones for each of the tools include:

Incentive and Vendor Index:

1. Vendor Input Form: A vendor input form has been created (see attachment A) that will gather information about energy efficiency and sustainable energy vendors, contractors, and installers in and around New Hampshire and present this information in the Incentive and Vendor Index tool. The vendor form has been reviewed by several NHSEA board members as well as a representative from New Hampshire Homebuilders Association who suggested several small improvements. **100% Completed**

2. Vendors and Contractors Dataset: Now that the input form has been developed, we are encouraging vendors and installers to list their companies in the Incentive and Vendor Index prior to the launch of the tool. Since compiling the dataset is somewhat independent of the tool development, we want to populate the dataset in the next six months in preparation for our April 2010 launch. **20% Completed (lacks records)**

3. Incentives Dataset: We have compiled a dataset of federal, state, and utility rebates and tax incentives for energy efficiency and sustainable energy projects. This is the second key dataset that is required for the Incentive and the Vendor Index tool. **100% Completed**

4. Incentive and the Vendor Index Mock-Up: We have developed a fully functional web mock-up of the tool (see Attachment B). The mock-up is a series of linked web pages (screen shots) that shows the sequence of steps and actions the user would take as they progress through the tool. The mock-up serves as a blueprint for the development of the tool; defining how the tool structured and organized and the required elements of each webpage. The mock-up can be shown to specific audiences for feedback, without undertaking the actual software programming. **100% Completed**

5. Residential Advisory Review of the Mock-Up: On Oct 6 and Oct 7, 2009 we presented the Incentive and Vendor tool mock-up to a group of residents for their review and feedback. Residents were either Energy Answers volunteers or members of the NH Sustainable Energy Association. Participants offered constructive comments and suggestions for improvements that were incorporated into the mock-up. Following this review, we began programming the tool. **100% Completed**

Energy Answers volunteers and NHSEA members will be serving as our residential advisory group, helping guide the development of all tools developed under this project. We also welcome new participants to the advisory group and will periodically solicit new members.

6. Coding of the Incentive and Vendor Tool We are currently writing the software code for this tool. Once this is complete, we will have the tool professionally designed and then rigorously beta-tested prior to the April 2010 release. **70% Completed**

Enhanced New England Carbon Estimator:

1. Framework Established: Since the initial release of the Carbon Estimator in October 2007, we have maintained an active log of user requests, comments, and feedback and are incorporating this feedback into our development of the enhanced Estimator. Among the goals we've established: serve the needs of renters more effectively, provide additional actions for "early adopters", recognize the previous actions of challenge takers, provide a means for challenge takers to periodically update their records, and assist challenge takers in developing a short term (2 year) plan to reduce their home energy consumption.

100% Completed

2. Enhanced Estimator Mock-up: We are developing a fully functional web mockup of the enhanced Estimator showing the sequence of steps and actions as the user progresses through the tool (see Attachment C). The number of potential actions has increased from 29 to 55 and a new section of additional measures (such as eating a vegetarian diet, reducing airline travel, and getting a home energy audit) has been added. The reporting feature of the Carbon Estimator has been significantly improved and the connection to their community organization has been strengthened. This tie-in to their local organizing entity is vital given the importance of social norms in galvanizing action. **70% Completed**

III Community Outreach Progress

The first quarter work in fulfillment of the GHGERF grant to the NE Carbon Challenge on the community outreach side has been equally successful. A snapshot of our progress:

1. On October 1, Clean Air-Cool Planet, one of the NECC "parent" partners, hired a Community Outreach Coordinator for the NECC as outlined in our GHGERF proposal. Garry Dow is now working out of the CA-CP offices, under the supervision of Julia Dunderf, exclusively on building a powerful base of support for NH individuals and communities around the NECC tools. As the new face of the NECC in NH, Garry has hit the ground running and is providing enhanced support to a number of initiatives as seen below.

2. Garry is spearheading the pilot launch of Button Up NH, a residential home weatherization workshop series (based on the effective model developed in VT) to two regions of NH this fall/early winter. Although additional funding will be sought for a state-wide launch in the fall of 2010, Garry is managing the revising and drafting of the resources to serve NH residents in 10 target communities in the Upper Valley, the southeast portion of NH (as well as Concord), in partnership with the Sustainable Energy Resource Group. Button Up NH has been adopted as an organizing and outreach tool under the NECC umbrella and will be accessed through the developing web tools described above. Our goal is to work with local organizers (such as Local Energy Committees) and professional energy performance professionals over the spring and fall to deliver workshops in dozens of

communities across NH in the fall of 2010. There is no income eligibility requirement for this program and workshops are free to both the organizers and attendees.

3. The GHGERF grant has enabled us to continue NECC work to provide deeper engagement and support for communities around residential outreach including:

- o The Concord Carbon Challenge (which recently concluded a 7 month ward by ward challenge led by the Concord Energy Committee)
- o Continued support of the Portsmouth/Keene Carbon Challenge
- o Planning for upcoming Nashua Carbon Challenge

4. With the new joint initiative between UNH and CA-CP in support of the NECC, we are more deeply integrating the NECC work with the New England Science Center Collaborative. We have designed a new workshop series for science center staff and volunteers to provide solution-based education on climate change and energy for formal and informal educators using science centers as hubs of outreach. As science centers play such key roles in community engagement this diffusion of the NECC and its new tools will serve as a very accessible resource for both individuals and community groups. We will be utilizing this approach here in NH as another outreach strategy to diffuse the NECC tools.

5. One of the job responsibilities of the Community Outreach Coordinator is working with the Climate and Energy Collaborative to develop, launch and manage an integrated Speakers Bureau in support of the NH Climate Action Plan. Garry has met several times with Stacy Doll, the new Collaborative Coordinator to move forward a broader launch of this Speaker's Bureau. As part of Garry's work and CA-CP's commitment to support the Climate Action Plan, Garry will receive, screen and manage all speaker requests in close coordination with Stacy.

6. As we continue to develop our new web-based tools, we are also honing and updating our community outreach products and services. Over the last three months, we have refined our community "Carbon Challenge Implementation Guides" to aid various organizations in leading successful outreach programs. These guides will be continually enhanced as best practices and lessons learned are garnered from our communities.

7. In an effort for greater collaboration on the residential outreach front, the NECC requested a meeting with PSNH, Unitil, NH Electric Cooperative and National Grid's CORE program coordinators to discuss tool collaboration, integration of outreach programming and utility participation in Button Up NH. We conducted a teleconference with representatives from the four utilities and although there was verbal encouragement for greater coordination, the agreed upon next steps (collaboration on Button Up NH) have not borne fruit. While the NECC is committed to playing a leadership role in encouraging this ongoing collaboration, participation by the utility representatives will be critical to creating the most effective programming on residential efficiency/conservation. Lack of such participation will create a significant barrier to the NECC developing the most effective, comprehensive tools and outreach possible.

8. In parallel with the developing discussions by the EESE Board's Outreach and Education subcommittee on the need for a coordinated statewide messaging campaign on energy/climate change, the NECC is beginning the process of building a stronger overarching messaging campaign specific to the NECC residential audiences. This will be conducted in conjunction with our graphics design firm and public relations consultants. Our recent attendance at the annual Behavior, Energy and Climate Change Conference provided the NECC with yet more resources and research behind the most effective outreach strategies. These emerging lessons-learned from the broader international

climate/energy community will inform our campaign development. We are working closely with Stacy Doll to coordinate our efforts with those of the Collaborative.

IV Work to be Completed Next Quarter: (10/1/09 – 01/31/10)

Incentive and Vendor Index:

1. Complete software programming of the Incentive and Vendor Index Tool
2. Volunteers from UNH Cooperative Extension's Energy Answers will attend the NHSEA Home Energy Conference on Nov 21 to assist vendors and installers with inputting their company information into the vendor input form.
3. The Incentive and Vendor Index will be graphically designed by a professional designer. (We are currently pursuing several potential design firms in the Seacoast NH region)
4. Beta test the Index tool with our Residential Advisory Group and with other NH residents.

Enhanced New England Carbon Estimator:

1. Complete mock-up of the Enhanced Estimator
2. Residential advisory review of the mock-up: A review with the Energy Answers volunteers has been scheduled for December 15, 2009. A second review with NHSEA members is planned for January 2010.
3. Assess the feasibility of using dynamic charting and graphing in the Estimator
4. Begin software programming of the enhanced Estimator
5. Have the enhanced Estimator graphics professionally designed

Although ahead of our committed timeline, our goal is to release both the Incentive and Vendor Index and the enhanced Carbon Estimator in April and debut these tools at the spring 2010 Local Energy Solutions annual conference.

Additional Activities:

1. Develop community progress "widgets" and make these widgets available to our community challenge organizers. These widgets will reside on the community challenge's website and will provide real time information on the Challenge (number of participants, pledged reduction in CO2, and energy dollar saved) and display this information on participating community challenges website. We are developing three levels of widgets: Bronze, Silver and Gold. Bronze and Silver widgets will be given based on the number of households participating in the challenge. Gold widgets will be reserved for communities that have implemented actions and programs to measure and verify the amount of energy reduced. This is a cutting-edge tool that assists local organizers in more effective community outreach strategies beyond brochures and flyers.

2. Retool our Google Map The growth in the number of communities implementing carbon challenges in the last few years has made our Google map (http://necarbonchallenge.org/maps/challenge_takers.jsp) crowded and more difficult to interpret. We will redesign the map to make it more readily understood.

3. Verification of Emission Reductions We have met several times with Carbon Solutions New England regarding the measurement and verification of energy reduced in the residential sector as a result of our program. Verification is uncharted territory. To the best of our knowledge no carbon reduction program has yet developed or implemented a comprehensive plan to address the verification of emission reductions. This speaks to the inherent difficulty and complexity of the task and is a testament to the number of stumbling blocks that stand in our way moving forward.

Many companies and organizations are working to solve this problem, but the marketplace lacks the organizing impetus to engage and integrate the best ideas. Because we cannot know what approach or combination of approaches will ultimately prove successful, the New England Carbon Challenge has positioned itself (wisely, we believe) as a place where promising verification schemes can be vetted.

To that end we have identified several potential opportunities. These include: (1) the use of smart meters in the home (2) fuel reduction verification via utilities or third-party distributors (3) direct user surveys and (4) data provided by resident homeowners.

In all cases we believe that successful and effective verification will require both strong incentives and thoughtful cooperation from the utilities. Thus far we have met with Grounded Power (a private electrical verification firm) about the possibility of a pilot project in smart metering, and with the New Hampshire Oil Heat Council (the most prominent trade association for oil companies in New Hampshire) about a pilot project in fuel reduction. Meanwhile we continue to verify our own achievements as best we can given the paucity of resources currently available.

Going forward it seems clear that our new tools will complicate the verification process significantly. Unlike the Carbon Estimator, which lends itself to quantifiable measurement, the Incentive and Vendor Index and the Green Homes Tourist are much more tangential. They fundamentally resist formal evaluation, but indirectly reduce greenhouse gas emissions by providing residents with direct access to vendors, installers, contractors and other homeowners. In an effort to make these connections more apparent, we will require vendors and contractors to provide us with sales and installation data as a condition for their continued promotion in the Incentive and Vendor Index and the Green Homes Tourist program.

Based on the implicit value of these tools and services, we believe they should not be discounted simply because they cannot be verified absolutely.

V Document Any Jobs Created:

The grant provided for the hiring of a full-time community outreach coordinator. Garry Dow was hired on October 1, 2009.

VI Budget Expenditures:

Provided with invoices

VII Obstacles Encountered or Milestones Not Reached:

None. We are on track on our tool development schedule and even slightly ahead of schedule.

ATTACHMENT A: VENDOR INPUT FORM

Vendor and Contractor Input Form

1. Please provide information about your company.

Company Name:

Address:

State: Zip:

Town:

Phone:

Website (optional): http://

Contact Person:

Email:

Company Logo: (must be JPEG) No file chosen

2. Please select the products and services offered by your company.

<input type="checkbox"/> Solar PV	<input type="checkbox"/> Biofuels
<input type="checkbox"/> Solar Thermal	<input type="checkbox"/> Geothermal
<input type="checkbox"/> Wind	<input type="checkbox"/> Biomass
<input type="checkbox"/> Efficiency Services and Remediation	<input type="checkbox"/> Micro Hydro
<input type="checkbox"/> Green Architectural Services	<input type="checkbox"/> Green Building Services
<input type="checkbox"/> Home Energy Audits	

Energy Efficiency Products
Please select the energy efficiency product sub-categories you sell and/or install:

<input type="checkbox"/> Appliances
<input type="checkbox"/> Lighting
<input type="checkbox"/> Air Sealing and/or Duct Sealing
<input type="checkbox"/> Insulation
<input type="checkbox"/> Windows and Doors
<input type="checkbox"/> Roofing
<input type="checkbox"/> HVAC Systems
<input type="checkbox"/> Comprehensive Measures
<input type="checkbox"/> Other <input type="text"/>

3. How many years of experience does your company have in providing these products and/or services?

4. Do you provide a warranty?

yes no

ATTACHMENT A: VENDOR INPUT FORM (CONTINUED)

5. (Optional) Please select your certifications, licenses, professional affiliations, and any awards your business has received.

Licenses and Certifications:

- BPI Building Performance Analyst
- HERS Rater
- LEED AP
- NABCEP (North American Board of Certified Energy Practitioners)
- CGP (Certified Green Professional)
- Other

Professional Affiliations:

- The Home Builders and Remodelers Association of NH
- A+ Better Business Bureau (BBB) accredited business
- NESEA (Northeast Sustainable Energy Association) member
- NHSEA (New Hampshire Sustainable Energy Association) member
- ASES (American Solar Energy Society) member
- NAHB (National Green Building Program) member
- Build Green NH
- US Green Building Council
- Other

Awards:

Other Educational Degrees or Certificates:

6. Please select your insurance.

- Workman's comp
- General liability

7. Please provide a one sentence tag line about your company that we can post on our site.

8. Please provide a description of your company.

ATTACHMENT B: INCENTIVE AND VENDOR TOOL UNDER DEVELOPMENT (PRE GRAPHICS DESIGN)

Start
Help

[Login](#)
[Privacy Policy](#)

Welcome to the Incentive and Contractor Index!

Interested in reducing your home's energy consumption? You've come to the right place! This tool can help you locate qualified contractors, installers, and vendors who provide energy efficiency and renewable energy products and interests in New Hampshire. We can also help you identify federal, state, and utility incentives for reducing the costs of energy improvements.

If you're interested in learning a bit more about renewable technologies our guides are a great place to start. Prioritize energy efficiency and conservation first ---the cheapest and best fuel source is the fuel you don't use.

Reap the benefits of a professional energy audit. We've got many auditors to choose from and they can give you customized recommendations for reducing your energy use. Implementing the auditor's recommendation puts you well on the path toward using renewable energy sources. And we can help you there as well!

Efficiency Products:



Efficiency Products

Appliances Lighting Air Sealing and/or Duct Sealing
 Insulation Windows and Doors Roofing
 HVAC Systems Comprehensive Measures Other

Efficiency Interests:



Efficiency Services and Remediation



HOME ENERGY AUDIT

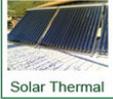


Green Architects



Green Builders

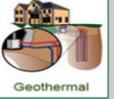
Renewable Energy Systems:



Solar Thermal



Solar Photovoltaics



Geothermal



Wind Turbines



Micro-Hydro



Wood



Biofuels

I live in

My electric provider is

How would you describe your household?

How much do you anticipate spending within the next year to reduce your energy consumption?

Start	Contractors	Incentives	Report	Next Steps	Help
Company	Location	Geographic Proximity (miles)	Contact	Phone	Add to Report?
TNT Electrical Contractor LLC.	Laconia, NH	35	Troy Mahoney	603-455-4217	<input type="checkbox"/>
SDES Group, LLC	Dover, NH	12	Tobias Marquette	(508) 395-5012	<input type="checkbox"/>
queen city remodeling & more llc	Manchester, NH	23	rick bouchard	644-2122 or 1-877-644-2122 or 518-5115	<input type="checkbox"/>
Plymouth Area Renewable Energy Initiative	Plymouth, NH	51	Sandra Jones	603-536-5030	<input type="checkbox"/>
Energy Audits Unltd, LLC	Manchester, NH	23	Paul Button	603-836-4402	<input type="checkbox"/>
Alteris Renewables	Hampton, NH	20	Steve Condon	831.331.3069	<input type="checkbox"/>
Adros Energy	Manchester, NH	23	Matthew Currier	603 880-6007	<input type="checkbox"/>

CONTRACTOR RESULTS:

DETAILED RESULTS: Plymouth Area Renewable Energy Initiative

Address:

PO Box 753 69 Main Street
Plymouth, New Hampshire 03264

Phone:

603-536-5030

Website:

<http://www.plymouthenergy.org>

Contact:

[Sandra Jones](#)

Services Provided By This Company:

Home Energy Audits
- Blower Door Testing
- Infrared Imaging
Green Building Services
Solar PV
Solar Thermal
Energy Efficiency Products: Air Sealing and/or Duct Sealing
Energy Efficiency Products: Insulation
Efficiency Services and Remediation

System Installs:

10 Home Energy Audits
20 kW Total PV installed
0 On-grid PV installs
6 Off-grid PV installs
120 Solar Thermal installs
2 Solar Thermal Pool Heating installs
5 Efficiency Services and Remediation

Number of years:

5

Does this company offer a warranty?

yes

Awards and Certifications:

NHSEA (New Hampshire Sustainable Energy Association) member
ASES (American Solar Energy Society) member
Residential Energy Professional Association
US Department of Energy Million Solar Roof Award
Our crew have at least a bachelor's degree. Plumber and Electrician are NH Certified

Insurance:

Workers Comp
General

Tag Line:

Helping Plymouth Area Residents and Businesses Reduce their Energy Consumption through Home Energy Audits and Planning Sessions and Produce some of their energy through Professional Solar Installations, Volunteer Solar Energy Raisers and DIY Proj. Support

Description:

We are a Non Profit Organization that helps our members develop an energy plan for their existing home or newly built home. We provide energy audits, solar site visits, green building consulting, professional solar water and solar electric installations, out of area solar consulting for homeowners, builders and plumbers, volunteer solar energy raisers, on-site training for communities that want to host an Energy Raiser, public speaking on energy issues and more!

INCENTIVE RESULTS:

DETAILED RESULTS: NH Electric Co-Op - Solar and Wind Energy Rebate

Website:

http://www.smallsteps.coop/coop_programs

Incentive Type:

Utility Rebate Program

Eligible Efficiency Technologies:

Eligible Renewable Technologies:

Solar Water Heat, Photovoltaics, Wind

Applicable Sectors:

Commercial, Residential, Nonprofit, Schools, Agricultural, Institutional

Incentive Amount:

PV: \$3.00 per installed watt (DC); Solar Hot Water: 25% of installed project cost; Wind: 25% of installed project cost

Maximum Incentive:

PV: \$3,500; Solar Hot Water: \$1,500; Wind: \$5,000

Terms:

Installation Requirements: System must be installed by a qualified installer Ownership of Renewable Energy Credits: Remains with system owner of the project

Eligible System Size:

Equipment Requirements:

Review/Certification: A monitoring and evaluation follow-up visit may be conducted by a NHEC engineer. System owner must also submit a project completion form.

Expiration Date:

2009: TBD

Summary:

New Hampshire Electric Co-Op (NHEC) will offer the following rebates again in 2009, although program guidelines and applications are not yet posted on their website. NHEC encourages those who plan to request a rebate in 2009, to call Co-op Member Solutions at 1-800-698-2007 to hold your place in the queue. Rebates will be awarded on a first-come first-served basis to members who install qualified systems and submit required paperwork. Check their website for updates. New Hampshire Electric Co-Op (NHEC) offers rebates to customers who install qualified renewable energy systems in its service territory. Members that install a solar hot water systems may receive a rebate of 25% of the installed system cost, up to \$1,500. Members that install a photovoltaic (PV) system may qualify for a rebate of up to \$3,500. NHEC is also providing incentives for the qualified installation of small and medium-sized wind generators of up to \$5,000. All projects must be installed by qualified installers, and systems must be installed in NHEC's service territory. See the program web site listed above for more information, applications and FAQs.

Contact:

Thomas Palma (for PV and Wind) Project Development Executive New Hampshire Electric Co-op 579 Tenney Mountain Highway Plymouth, NH 03264 Phone: (603) 536-8650 Web site: www.nhec.coop Mike Reynolds (for Solar Hot Water) New Hampshire Electric Co-op 579 Tenney Mountain Highway Plymouth, NH 03264 Phone: (800) 698-2007 Web site: www.nhec.coop

ATTACHMENT C: MOCK-UP OF DRAFT CARBON ESTIMATOR

Introductory Page and Data Gathering:

[View Info](#) | [Automobiles](#) | [Home Heating](#) | [Electricity](#) | [Recycling](#) | [Other Actions](#) | [Results](#) | [Next Steps](#)



PLEASE TELL US ABOUT YOUR HOUSEHOLD:

Let's start by gathering some essential information about your home and how your household uses energy. Consult your [fuel](#) and [electric](#) bills for your annual consumption of electricity, home heating, and hot water fuels.

My household has people in it

We live in: State: City:

My electric provider is:

I rent my home/apartment
 I own my home

Approximate square footage of home/apartment

Electricity:

I use KWH of electricity per year

Home Heating:

If you don't have your bills handy, use our [fuel tool](#) to estimate your fuel consumption. It will give you a reasonable approximation for your household, which you can update later when you have the actual bills. We also provide household [fuel averages](#).

My Primary Heat Source is

I use gallons of oil per year

My Secondary Heat Source is

I use (gallons/therms/cords) of ___ per year

Automobiles Sector:

[Your Info](#) | [Automobiles](#) | [Home Heating](#) | [Electricity](#) | [Recycling](#) | [Other Actions](#) | [Results](#) | [Next Steps](#)



VEHICLE EMISSIONS:

Every gallon of gasoline produces 20 pounds of carbon dioxide, and therefore vehicles are a significant source of greenhouse gases. There are several ways to reduce automobile emissions.

I have

Your **First Vehicle**

My **first vehicle** gets MPG and is driven miles per year.

ACTIONS YOU COULD TAKE	YOUR SELECTION	STATUS	CO2 SAVED ANNUALLY assumptions	DOLLARS SAVED ANNUALLY assumptions	COST TO IMPLEMENT
Replace my vehicle with a more fuel efficient car that gets ___ MPG.	<input type="text"/>		4500	280	
Refrain from aggressive driving: Adhere to speed limits, avoid quick starts and stops.	<input type="text"/>		(800)	(120)	
Drive ___ fewer miles per week (through carpooling, telecommuting, putting kids on the school bus, combining errands etc).	<input type="text"/>		1200	180	
Obey the speed limit	<input type="text"/>				
Maintain adequate tire pressure	<input type="text"/>				
Keep your vehicle tuned up and maintained; Check and replace air filters regularly.	<input type="text"/>				
Limit "junk in the trunk" and unnecessary rooftop items	<input type="text"/>				

Linking The Household To Their Community:

[Your Info](#) | [Automobiles](#) | [Home Heating](#) | [Electricity](#) | [Recycling](#) | [Other Actions](#) | [Results](#) | [Next Steps](#)

[YOUR ACTIONS](#) | [YOUR FOOTPRINT](#) | [YOUR COMMUNITY](#)

YOU ARE 1 OF 216 HOUSEHOLDS IN CONCORD, NEW HAMPSHIRE THAT ARE TAKING THE NEW ENGLAND CARBON CHALLENGE

SO FAR, CONCORD RESIDENTS HAVE:

- Pledged to reduce their energy usage by an average of **16%**
- Are implementing actions that will save **1.459 million pounds CO2**
- Are implementing actions that should result in savings of **\$137,458** per year to Concord residents
- Concord is currently ranked **#1** among New England communities taking the Carbon Challenge

COULD YOU HELP THE CONCORD CARBON CHALLENGE REACH ITS GOAL OF 250 HOUSEHOLDS TAKING THE CHALLENGE?

A Message from Rob Werner, City Councilor:

Hi Folks, Only a few days left until the Concord Community Challenge ends. We've had terrific participation and we've now taken the lead as the number one city in New England taking the Carbon Challenge. Could you help us in our final push and use link below to email your friends and neighbors encouraging them to take the Challenge? Thanks!

Please join us on Saturday, Oct 25 at the State House Lawn for Concord's Climate Fest. Rain or Shine. See you then!

EMAIL YOUR FRIENDS AND FAMILY:

Share the Challenge [link](#)

Recommended Next Steps:

[Your Info](#) | [Automobiles](#) | [Home Heating](#) | [Electricity](#) | [Recycling](#) | [Other Actions](#) | [Results](#) | [Next Steps](#)

Next Steps:

GET A PROFESSIONAL ENERGY AUDIT

Now that you've identified actions to take in your home to reduce your energy consumption, we recommend you take the next step and have a professional home energy audit. Every house is different and an auditor will assess your home's energy performance and recommend air sealing, insulation, and other measures you should take to reduce your energy usage further.

Our Incentive and Contractor Index provides a listing of qualified energy auditors near you.

ADDITIONAL WEATHERIZATION MAY BE NEEDED

Your Home Heating Index Score of

suggests your home may be a good candidate for weatherization services. Contact New Hampshire Electric Cooperative at: 1-800-698-2007 or by email: solutions@nhcec.com and ask about reduced cost weatherization programs they provide.

THE ENERGY NOTEBOOK

For your convenience, we have added the results of your challenge to your Energy Notebook. The Energy Notebook houses all the results of the energy tools you have used so far.

To create and use the Energy Notebook you must be logged in. If you've created a login account previously, login now. If you haven't created a login account before, select the "New User Login" below.

You do not have to create a login account with us, but your information will not be saved and accessible by you in the future without this login account.

Your Energy Notebook is [here](#).

DO YOU HAVE OTHER ENERGY QUESTIONS?

If you have energy questions, UNH Cooperative Extension has Energy Answers. Trained Energy Answers volunteers are available to assist you in answering energy related questions and identifying appropriate resources.

CENTER HOURS:

The center is staffed from 9:00am to 2:00pm Monday through Friday and Wednesday evenings from 5:00pm to 7:30pm.

CONTACT INFORMATION:

[E-MAIL](#) your questions

or CALL us: TOLL FREE NUMBER: 1-877-EXT-GROW (1-877-398-4769)

MAILING ADDRESS: 200 Bedford Street, Manchester NH 03101