

## 1.1 PROGRAM TITLE

### MEASURING, MANAGING AND PLANNING:

### A ROADMAP TO REDUCING GREENHOUSE GASES IN NEW HAMPSHIRE TOWNS

## 1.2 Program Type

This project comports with several of the programs pursuant to PUC 2604.01(c), including: energy audits; weatherization of commercial building stock; programs to improve the electric and thermal energy efficiency of existing commercial buildings; and education outreach and information programs that promote energy efficiency conservation and demand response.

## 1.3 Program Summary

The project team, with overall coordination by Clean Air-Cool Planet, proposes to provide between 24 and 48 New Hampshire towns with the baseline information, specific recommendations and on-going support necessary to renovate their most inefficient municipal buildings, with a long-term goal of seeing energy use in those buildings decrease by 50%. We will accomplish this by carrying out a sequence of greenhouse gas emissions inventories and energy/policy audits for between 24 and 48 geographically diverse communities in New Hampshire. The inventories will demonstrate the baseline carbon footprint of municipal operations in each community, while the energy audits will provide specific, comprehensive recommendations for cutting one underperforming building's emissions by half. Policy audits for a selection of the communities will demonstrate how regulatory policies at the municipal level may be unnecessarily contributing to greenhouse gas releases. The project team will provide on-going direct support to participating communities in presenting findings and recommendations to selectboards and initiating the building renovations that will result in significant greenhouse gas emissions reductions. All phases of this project will be accompanied by a program of public engagement and education, both for the selected communities, and for the broader New Hampshire audience.

## 1.4 Low Income Resident Customer Qualification

This program does not directly serve low income residential customers. However, the project team will utilize the socio-economic rankings created by the New Hampshire Community Development Finance Authority for use in the administration of its Community Development Block Grant program, both as a factor in the community selection process and in deciding whether community participation fees (described in detail below) may be waived.

## 1.5 Applicant Information

Clean Air-Cool Planet Inc. was incorporated in November 1999 in the state of Massachusetts. We are registered with the Secretary of State (registration number 12076, as of July 13, 2000). The main contact for this proposal is Roger Stephenson, Clean Air-Cool Planet's Executive Vice President for Programs. He can be reached at (603) 570-7504; rstephenson@cleanair-coolplanet.org; or 100 Market Street, Suite 204, Portsmouth, NH 03801.

## 1.6 Subcontractors and Partners

On this project, Clean Air-Cool Planet staff (specifically Executive VP of Programs Roger Stephenson; Community Program Manager Christa Koehler; and Carbon Coalition Field Organizer Julia Dundorf) will work with the following subcontractors:

Main Point(s) of Contact	Organization	Address
Michael Behrmann, Christopher Dundorf, Tobias Marquette, Clay Mitchell	Sustainable Development & Energy Systems Group, LLC	2 Washington Street, Suite #206 Dover, NH 03820
Jeff Taylor, Stephen Whitman	Jeffrey H. Taylor & Associates	136 North Main Street, Suite 4 Concord, NH 03301
Cameron Wake	Carbon Solutions New England, University of New Hampshire Institute for the Study of Earth, Oceans and Space	Morse Hall 8 College Road, UNH Durham, NH 03824
Robert Walker	Sustainable Energy Resource Group	432 Ulman Rd. Thetford Center, VT 05075
Gabe Zoerheide	Vital Communities	104 Railroad Row White River Junction, VT 05001

### 1.7 Authorized negotiator

Any and all aspects of this proposed grant may be negotiated with Roger Stephenson, Accredited in Public Relations, Clean Air-Cool Planet’s Executive Vice President for Programs. He can be reached at (603) 570-7504; rstephenson@cleanair-coolplanet.org; or 100 Market Street, Suite 204, Portsmouth, NH 03801.

### 1.8 Projected Energy Savings

We project that participating towns will save 5,077 MMBtu in fuel and 1,218 MMBtu (357 MWh) in electricity within the first year, with a cumulative twenty-year total of 101,540 MMBtu of fuel oil and 24,360 MMBtu in electricity (7,140 MWh). (See appendix for detailed calculations.)

### 1.9 Projected GHG Reductions

Assuming the same numbers and analysis used in 1.8, participating towns would avoid 545 metric tons of greenhouse gas emissions in the first year.

### 1.10 Length of Program

From the identification of towns to the completion of the inventories, energy audits and policy audits, we anticipate that this project will take a full year. Our goal is to see the first renovations and community reductions projects moving forward within the term of a one-year grant. A future grant from the PUC would help us perform follow-up inventories in participating towns once their reductions measures are in place.

### 1.11 Total Program Costs

Total costs for this project are \$515,817.00.

### 1.12 GHGER Funds Requested

Of this total, we are requesting \$400,000 through this RFP. The remaining \$115,817 of the budget will come from existing donation/foundation reserves; in-kind support and very modest municipal contributions. (This is explained in more detail in the budget narrative section.)

## 2 Executive Summary

Clean Air-Cool Planet (CA-CP), the coordinating applicant for this proposal, has made **significant investments in, and accumulated much on-the-ground experience**, helping NH Local Energy Committees build sound infrastructures, inventory their towns' emissions, identify priority projects and enlist community support. The past few years have seen a dramatic increase in the number of New Hampshire (and New England) towns forming LECs – groups of citizens charged with assessing and improving community action on global warming and energy use. Through our work with New Hampshire LECs and communities in general, we have performed over three dozen town-level inventories and supported more than 90 New Hampshire LECs. The Sustainable Energy Resource Group (SERG), a project partner, has similar experience consulting and networking with some 75 LECs in Vermont and in New Hampshire's Upper Valley region.

CA-CP and SERG, along with Jeffrey H. Taylor and Associates (JHTA); Sustainable Development & Energy Systems, LLC (SDES); Carbon Solutions New England (CSNE); and Vital Communities (VC) propose a collaborative project to carry out a sequence of greenhouse gas emissions inventories and energy audits for between 24 and 48 geographically diverse communities in New Hampshire, setting the stage for these communities to perform renovations to selected buildings that would reduce energy use by as much as 50%. In each of the 24-48 selected communities, we will use EPA's Portfolio Manger, the new Small Town Carbon Calculator (STOCC), CACP software from ICLEI, or some combination of the three to inventory municipal emissions, prepare a summary report, and present that report to select boards, town officials, and members of the public.

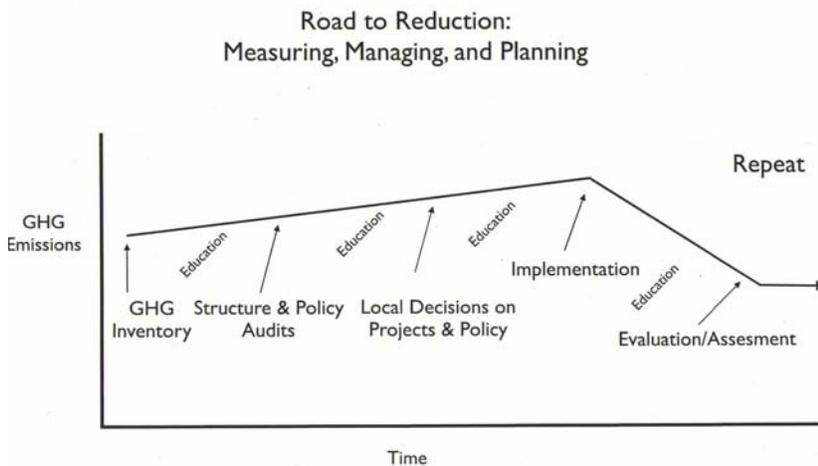
Once initial inventories are complete, we will work with each participating town to identify a low-performing building and to carry out an energy audit for that building. In most of the towns, the selected building will receive a Decision Grade energy audit, a type of basic audit designed to identify most, if not all, energy conservation measures appropriate for a facility given its operating parameters and site owner's objectives. In the remaining two to five communities, to be selected based on their participation in the inventory stage of this project, we will conduct more in-depth Investment Grade audits for their lowest-performing municipal building. Both types of audits will culminate in a set of recommendations for building retrofits and renovations that would allow the town to reduce its building's energy use by 50% within a 60-month timeframe. In addition, a representative sample of six communities will be chosen to receive comprehensive policy audits. These will focus on whether regulatory policies at the municipal level are unnecessarily contributing to greenhouse gas releases, for example by requiring overly dispersed development patterns or preventing the expansion of existing village centers. Findings will be presented to select boards and town officials with the goal of effecting changes in local policies.

Once all audit reports are released, the project team will provide on-going support to towns as they begin the process of identifying priority renovations/retrofits, creating RFPs, hiring contractors and realizing their potential reductions.

All phases of this project will be accompanied by a program of public engagement and education, both for the selected communities, and for the broader New Hampshire audience.

Local involvement in participating communities will be solicited in both the inventory and the audit processes, trainings in inventory and audit practices and home weatherization will be offered, and all results and reports will be released at community events. For towns throughout New Hampshire, we will publicize success stories through press releases in the media and through case studies on the Clean Air-Cool Planet website, as well as through discussion

sessions at Clean Air-Cool Planet's upcoming LEC Conference, and through informal distribution to about 100 existing New Hampshire Local Energy Committees.



Through this project, we will build capacity within New Hampshire towns to address their energy use and greenhouse gas emissions in a systematic, effective and locally relevant way. This will in turn yield the benefit of

reduced emissions within these towns, on the order of about 50%. This benefit will begin to be realized within the term of a one-year grant, but will primarily be realized in the longer term, as towns begin to undertake recommended renovations with on-going support from the project team.

The project will cost a total of \$515,817, which includes a request for \$400,000 to the Public Utilities Commissions and a match of \$115,817. This match will be through in-kind donations of time and services by the project team, as well as through contributions from the participating towns. We will ask each town to defray 10% of the cost of their energy audit, at about \$100 for a Decision Grade audit and \$650 for an Investment Grade audit. Exceptions will be made for towns with socio-economic rankings in the bottom third of the state, as ranked by the New Hampshire Community Development Finance Authority for use in the administration of its Community Development Block Grant program, or for towns that can make significant contributions of manpower or other resources to the project.

### 3 Proposed Work Scope and Schedule

Through this project, coordinating applicant Clean Air-Cool Planet and the rest of the project team will drawn upon our existing networks of Local Energy Committees (LECs) and community leaders throughout New Hampshire, as well as our experience conducting nearly forty greenhouse gas emissions inventories at towns and cities in New England. Existing plans for LEC trainings and events, including a major LEC conference scheduled for June 20 in Concord, will supplement efforts to help participating towns measure and analyze their energy consumption, identify opportunities for reductions and begin to undertake major building renovations and/or retrofits.

To help between 24 and 48 New Hampshire take the first steps to renovate an underperforming municipal building and reduce its energy use by 50%, we will deliver technical assistance in the form of greenhouse gas inventories and audits, as well as in-depth follow-up analysis and on-going support. Within the term of a one-year grant, this project will build towns' capacity to address local GHG emissions effectively, increase their understanding of their own unique patterns of energy use, and support them as they begin concrete efforts to reduce emissions from their building stock. Greenhouse gas emissions reductions and energy savings on the order of about 50% will be realized over the longer term.

This project will be carried out by a collaborative of like-minded organizations: Clean Air-Cool Planet (CA-CP); Jeffrey H. Taylor and Associates (JHTA); Sustainable Development & Energy Systems, LLC (SDES); the Sustainable Energy Resource Group (SERG); Carbon Solutions New England (CSNE); and Vital Communities (VC).

As the core of the proposed project, we will deliver to 24-48 geographically diverse communities in New Hampshire a series of greenhouse gas emissions inventories, energy audits, follow-up analysis and on-going implementation support, with the ultimate goal of increasing local capacity and demonstrating concrete steps to reduce energy use in underperforming town buildings by 50% within a 60-month time period.

Communities will be selected for participating by members of the project team through a simple application process. Applications will consist of a request letter, signed by a local selectman, a representative of the Planning Board, and a Local Energy Committee member, summarizing the town's capacity to participate in this project and its commitment to undertaking recommended building renovations following an energy audit. Internally, the project group will also take several other factors into account, including the potential for results to be transferred to other communities; the socio-economic ranking of the town as measured by the New Hampshire Community Development Finance Authority for use in the administration of its Community Development Block Grant program; and how a particular town would contribute to the overall geographic diversity of the project.

*Step 1: Compiling baseline greenhouse gas emissions inventories*

**A municipal GHG inventory is the necessary first step for communities wishing to manage energy loads, understand energy requirements, and reduce greenhouse gas emissions.** The inventory analyzes individual buildings in order to benchmark and evaluate each building in terms of national performance standards, allowing decision makers to prioritize potential emissions reductions measures. It helps a town understand how each sector of its government operations is performing by measuring energy used, CO<sub>2</sub> emissions, and energy costs for municipal buildings, streetlights, and the public fleet.

We will work with our selected 24-48 New Hampshire communities to carry out a baseline municipal GHG inventory and verify the results, illustrating where the municipality is actually spending its energy dollars both within buildings and within vehicle fleets. While we are not limiting the towns we choose to those with appointed LECs, having an existing energy committee is a demonstration of existing capacity, and will be taken into account in the selection

process. In each community, we will choose from three readily available tools to complete our municipal GHG inventories: EPA Portfolio Manager, the newly-developed Small Town Carbon Calculator and (when appropriate or requested) the ICLEI software. Data will primarily be gathered by student interns, who the project team will recruit, train and supervise. This phase of the project will primarily call upon the efforts of CA-CP, SERG and VC, with the latter two groups taking the lead with communities in New Hampshire's Upper Valley region.

During the inventory process, municipal staff and LEC members will learn how to track and manage municipal energy use, as well as how to present to and educate members of the community on this topic. Meanwhile, community members will learn the direct relationship between greenhouse gas emissions and energy consumption. Therefore, not only does the municipal inventory establish priorities for projects, it also educates community members on energy consumption and the direct link to greenhouse gas emissions, thus serving a local, place-based education and outreach function.

At the conclusion of the inventory, each participating town will receive a baseline Inventory Report: a summary of greenhouse gas emissions and energy use for the municipality for an identified year. The focus of the report is the community's municipal operations: It does not encompass school, residential, commercial, or industrial energy use. Each report will include a list of priorities and action recommendations based on the results of the inventory (see sample report in the appendices) and will be presented to select boards and town officials during a regular public meeting. We will also provide template reports and presentations and provide guidance in customizing these tools to a town's specific data.

Following the completion of communities' GHG emissions inventories, SDES will assist in reviewing the results of the inventory and attend scheduled meetings intended to present the inventory results to the public and local officials. SDES staff will apply the inventory results by conducting a brief site visit to the three lowest-performing buildings within the scope of an inventory to determine which building would be the most productive and effective candidate for an energy audit.

### *Step 2: Conducting energy audits*

Once the baseline inventories are complete and an underperforming building has been selected in each community, SDES will step in to lead the process of providing each participating town with an energy audit. Energy audits are distinct from inventories in that they generate specific recommendations on how to capture energy efficiency and conservation (e.g., retrofits, alternative energy supplies, insulation) for a particular building. This allows town officials to make comprehensive informed decisions based on the highest potential of energy and greenhouse gas reductions while maintaining a good return on investment.

Every participating town will receive one of two types of energy audits on an underperforming building chosen in collaboration with CA-CP, SDES, SERG and/or VC in the inventory stage of the project. Most of the towns will receive a Decision Grade Audit – this audit identifies the basic energy savings opportunities present in a selected building, and includes as part of its analysis recommendations aimed at increasing building efficiency by at least 50% of current values (as quantified in the GHG emissions inventory). Between two and five of the towns,

chosen on the basis of their participation in the inventory phase, will receive an Investment Grade Audit, a more complex, comprehensive audit with a higher level of financial analysis. (See the appendices for an overview of the two types of audits.)

At this stage of the project, towns will be asked to defray 10% of the cost of conducting their audits. For towns receiving Decision Grade Audits, this would represent a cost of less than \$100, while towns receiving Investment Grade Audits would be asked to contribute about \$650. The project team will encourage communities to raise the fee by approaching one or more local business or fundraising from individuals (for example, through a bake sale) as a means to both increase community buy-in and raise awareness of the project. Exceptions will be made for communities who are ranked in the lower third by the New Hampshire Community Development Finance Authority, and for communities that are able to provide significant in-kind support for the project through donations of manpower, supplies or expertise.

**SDES will serve as Community Energy Advocates** for communities not receiving Investment Grade Audits in this round of the program – there would be a maximum of 43 communities that fall into this category. The advocate will work closely with municipal officials to assist with the identification and selection of an outside auditor capable of conducting an Investment Grade Audit, assist with reviewing the audit, review of draft RFP's and the subsequent submissions in response to the RFP, identifying potential project funding sources, educating staff and facility operators on management practices at the facility, and providing general support to community leaders engaged in the project implementation phase. The advocate will serve as a trusted project guide that can assist with verifying contractors and answering questions municipal official may have while approving and implementing recommendations provided in the audits. The developed framework is highly replicable and builds a layer of trust needed to continue a relationship with the community in order to monitor and verify energy and emission reductions during subsequent rounds of funding. The full breadth of this process brings a community to the point of simply approving vetted and verifiable projects to reduce energy consumption.

### *Step 3: Conducting policy audits in selected communities*

While most New Hampshire communities have a master plan outlining plans for growth, their regulatory framework is often at odds with this vision. A town may wish to preserve its rural character, but have regulations making it difficult to establish a small farm stand. Downtown revitalization may be a goal, but on-site parking requirements can make that difficult to accomplish.

This is no less true in the energy field. While a master plan may embrace green principles, we've often found that the zoning ordinance requires overly large lot sizes, creating dispersed patterns of development that in turn require travel by auto for the simplest of errands. While many communities embrace economic development and the creation of a more diverse tax base, we find that the zoning ordinance and site plan regulations make it difficult to develop new small scale stores in traditional town centers, forcing residents to drive to the next town for milk, bread, and the other daily necessities. Similar contradictions occur when citizens try to minimize their carbon impacts by recycling, but find the roads they use when driving to the transfer station are unnecessarily wide because of the town's paving standards.

JHTA will take the lead on the **third phase of the project** – conducting policy audits for six New Hampshire communities. These audits are geared at identifying changes to a town’s regulatory framework that might be made to reduce its greenhouse gas releases. The communities chosen will be varied in size, location and the complexity of their regulations

For several years, JHTA has been performing regulatory audits for New Hampshire communities, making note of particular elements of the zoning and other regulations that are inconsistent with the goals and vision of the master plan. In the Town of Temple, the firm has partnered with CA-CP to undertake such a review with a particular focus on energy consumption issues. Can a business reasonably be started in the village? Are there opportunities for creating new residential development at higher densities on land adjacent to the town center? Can shared or community leach fields be developed to accommodate this denser development? The outcome of this dialogue has been the first ever joint meeting of the planning board and the local energy committee to discuss shared goals and possible actions. The complete audit is included in the appendices.

*Step 4: Project implementation and funding guidance*

As towns wrap up their audits and begin the process of implementing priority recommendations, the project team will continue to work closely with them to provide resources, answer questions, and troubleshoot. In the capacity of Community Energy Advocates, SDES in particular will provide assistance in drafting RFPs, identifying contractors, and in general getting building renovations and retrofits off the ground.

We will strive as well to provide additional education, outreach and guidance, both to participating communities and to those that were not selected for this phase of the program. These educational efforts will include highlighting successful projects on CA-CP’s website and at CA-CP’s upcoming LEC conference, scheduled for June 20 in Concord, NH. In addition, SERG and VC will work together to offer “Button-Up New Hampshire” home weatherization workshops to communities in the Upper Valley and potentially elsewhere in the state.

*Step 5: Post-Project Evaluation*

While outside of the scope of this proposal, **we intend to work with local energy committees to see that municipal inventories are carried out post-project and compared to the baseline inventories**. We anticipate that this work to quantify results will be the focus of a future grant proposal to the RGGI program.

*Expected Timeline*

While what follows is a timeline that “fits” a town from inventory to project completion, we know from experience that some communities are ready to audit. In these cases we are prepared to fast-track accordingly and then advocate and counsel for a town, using a suite of tools we can make available, to ensure the most appropriate projects are carried out by qualified experts.

Month	Activity
Months 1-2	We have developed the Small Town Carbon Calculator and are training UNH Sustainability Interns in its use. We plan to advertise summer positions immediately after confirming an award, especially within the

	Community College System of New Hampshire. CA-CP will hire 10 students and in May train them on the software and orient them on municipal government operations and communications. Each CA-CP supervisor will oversee three – four students for the duration of the project. We anticipate our training to be ‘picked up’ by faculty and developed into curriculum that stays with the community colleges. Faculty at UNH will serve as mentors.
Months 3-5	Student interns will collect data and work with the town’s Local Energy Committee or designated liaison to produce the inventory reports to the selected towns. Where towns have completed inventories we will begin acting on that inventory with fast-track audits and subsequent counsel to help communities move to projects. The first set of two policy audits will be carried out.
Months 6-8	CA-CP and CSNE will present findings in targeted conferences and in communications to policymakers. SDES will participate with LEC representatives and interns in the public presentations of the inventory findings and recommendations. SDES will then begin evaluating the lowest performing facilities to determine the best candidate in that community for an energy audit. Depending on the identified community, specific audits will commence following a site visit to the communities three lowest performing buildings. SDES will carry out audits on a continual basis and provide LEC representatives the final audit report for their review and to answer any questions that may arise. The second set of two policy audits will be carried out.
Months 9-12	We will help LECs present audit results to municipal officials and members of any interested committees (i.e., budget, planning) and the general public and assist with explaining the next steps, including ways the community can bring the results to project status as well as support for same at Town Meeting 2010. Ideally, the next steps will include acting upon the audit recommendations, carrying out an Investment Grade audit, and identifying additional product and service providers to begin to develop projects. The third set of two policy audits will be carried out.

*Project Oversight*

CA-CP’s Vice President for Programs Roger Stephenson will be responsible for project oversight, working closely with staff and consultants throughout the phases of this program. Stephenson is experienced managing complicated projects that involve people and public interests including the American Heritage Rivers Program under President Clinton.

*Financial Management*

CA-CP’s Finance Manager Brenda McCartney will administer any funds received through this RFP. She is experienced in working with diverse stakeholders to provide accounting on collaborative and pass-through grants.

### *Quality Assurance*

CSNE will verify all “before” and “after” greenhouse gas inventories to assure energy use data and calculated greenhouse gas emissions are realistic. These analyses will be based on actual thermal and electrical energy use as determined from all energy bills. (Final GHG inventory reports will be subject to review and approval by a representative of a community’s LEC, CA-CP’s Community Program Manager, and an SDES representative.) CSNE will also analyze all costs associated with the project to determine cost of implementation as well as cost savings via reduction in energy use. Finally, CSNE will estimate the number of green jobs created as a result of the project.

## 4 Project Benefits

We expect that the proposed program will address several benefits tagged as priorities by the RFP, including those listed below.

- *4.1: Reduce greenhouse gas emissions from all fuels used to provide electricity, heating and cooling in New Hampshire*  
Offsets in emissions will be achieved by implementing the most effective reduction retro-fits and practices in all project participants and more intensive projects in the Investment Grade participants. These efficiency upgrades will focus on the heating system efficiencies, design, and equipment. Additional examination of the electrical loads in the context of fixtures, usage, equipment, and controls through the building will provide emission reductions for electricity use. The results of these upgrades and retro-fits can be benchmarked and evaluated within 1 year to test the effectiveness and integrate recommendations for future projects.
- *4.2: Be cost-effective*  
The resulting projects that follow Decision Grade audits will be low cost projects that can utilize the utility programs and/or can be paid for by the participating communities as part of a municipal building maintenance account or reserve fund. These projects will be likely to have paybacks within 2 to 3 years. The more intensive projects will also be targeted toward utility rebate programs and focus on towns that have greater fund availability and will have paybacks within 5 years considering the savings.
- *4.3: Reduce New Hampshire's peak electric load*  
Because these audits will occur during the summer months, the project team will gain significant information into the operation of selected facilities during the peak electric load months. The analysis for the electric systems in these buildings will propose load reductions throughout the day by increasing the efficiency of the existing equipment (lighting and occupancy sensors) and will result in reduced loads during peak periods by an overall reduction strategy.
- *4.4: Promote market transformation*  
Market transformation requires attention to barriers: limited product availability, lack of consumer awareness of products and benefits, resistance to “new” products, and the natural focus on upfront (vs. operating) costs. The audit and implementation program will include significant educational components that convey information about proven technologies,

provide relevant examples for technologies and strategies identified, and will be structured so that investments are couched in terms of life-cycle costing for implementation as well as initial costs. Specific case studies for technologies will be cited during the audit and educational process to bring recipients up to speed on the state of current and future technology.

- *4.7: Promote energy cost savings*

The audits will produce recommendations aimed at reducing a facility's energy consumption by about 30%-50%. If these audits are actualized, each municipality will save a corresponding amount on their energy costs.

- *4.8: Promote collaboration and provide useful information for future program evaluation and improvement*

Working through the local government process we are promoting collaboration among local committees (budget, planning, zoning board, conservation commissions within and among towns); civic collaboration; and coordination with regional planning commissions. Our education will involve opinion leaders within communities which in turn will invite collaboration with the private sector, with schools and with residents.

This project will provide program evaluation information in part through the work of CSNE, who will track progress towards project goals, including analysis of energy use and expenditures, greenhouse gas emissions before and after project implementation. These data will then be used to identify the projects that provide the most cost-effective greenhouse gas reductions. CA-CP and CSNE will share results with the Local Government Center, professional planners, state agencies and policy makers.

- *4.9: Otherwise be consistent with the public interest and the purposes of RSA 125-O:19.12*

This proposal directly supports and addresses recommendations found within the draft New Hampshire Climate Action Plan (full text of these sections in their current draft form can be found in the appendices):

*STRATEGY 1: Maximize the Energy Efficiency in Existing Commercial, Industrial and Municipal Buildings.* Our proposal clearly establishes this type of program through the inventories and audits being delivered. The inventories and audits are the foundational steps necessary for municipalities to reduce their emissions through identified, prioritized and supported building retrofits.

*STRATEGY 8: Lead By Example in Government Operations*

Our proposal creates a structure for municipalities to adopt baseline measures and establish ongoing practices, and provides significant support for the creation and support of LECs in the state.

*STRATEGY 10: Develop an Integrated Education, Outreach, and Workforce Training Program*

CA-CP has been and remains at the cutting edge of climate change solutions education and outreach. Our proposal includes significant peer-to-peer education, including an LEC

conference and Button-Up New Hampshire home weatherization workshops, and involves training students who are likely to find themselves in energy related fields.

5 Measurement and Verification

CSNE will oversee and analyze “before” and “after” data collection on energy use, energy expenditures, and greenhouse gas emissions, as well as the cost of implementing the entire project. This data will provide baseline data on progress towards project goals. Data collection will be standardized based on type and square footage of building so that different projects can be directly compared. CSNE analysis will also include estimates of job creation and other direct and indirect economic impacts related to the project. This analysis will help the PUC identify the most cost-effective means for reducing the State’s consumption of fossil-fuel based energy sources.

CSNE will also “scale up” municipal building upgrade performance data from to estimate the potential state-wide improvements in municipal buildings and reductions greenhouse gas emissions, as well as potential impacts on the state economy (including costs/benefits/job creation).

6 Budget

A budget spreadsheet is included in the appendices to this proposal. (A cost-benefits analysis will follow under separate cover in time for the revised deadline of Friday, 3/27.) CA-CP staff assigned to this project are outlined in the table below:

Position/Staff name	Hourly Rate	Hours	Salary	Benefits	Total
Community Program Manager – Christa Koehler	\$ 27.48	1305	35,861	11,117	46,978
Community Program Manager – To be hired	\$ 27.48	1305	35,861	11,117	46,978
Executive VP – Programs – Roger Stephenson	\$ 50.38	494	24,888	7,715	32,603
Corporate Program Manager – Robert Sheppard	\$ 42.75	48	2,052	636	2,688
Communications Manager – William Burtis	\$ 32.06	120	3,847	1,193	5,040
Webmaster – Kay Harrison	\$ 22.14	160	3,542	1,098	4,640
Administrative Assistant – Lynn Sullivan	\$ 19.08	192	3,663	1,136	4,799
Finance Manager – Brenda McCartney	\$ 29.01	60	1,741	540	2,281
Interns - 12 to be hired	\$ 14.00	3408	47,712	3,913	51,625
<b>TOTALS</b>			<b>\$159,167</b>	<b>\$38,465</b>	<b>\$197,632</b>

Benefits include payroll taxes, workers comp, health, dental, life/disability, and 403b match. The total benefit rate for all salaried staff is 31%. Interns will be part-time and will not be eligible for benefits. Their benefit rate is set at 8.2% and includes only applicable payroll taxes and workers compensation. Contracted Labor includes SDES, Jeffrey Taylor, Vital Communities/SERG and CSNE for the following amounts:

	Requested	Minimum	Maximum
SDES	\$144,240	\$ 97,850	\$190,630
Jeffrey Taylor & Associates	\$ 60,000	\$ 60,000	\$ 60,000
Vital Communities/SERG	\$ 48,000	\$ 33,000	\$ 63,000
CSNE	\$ 9,000	\$ 9,000	\$ 9,000
<b>Totals</b>	<b>\$261,240</b>	<b>\$199,850</b>	<b>\$322,630</b>

Rent, utilities and insurance line items are calculated at 1/6 of the annual totals for CA-CP's Portsmouth headquarters, which corresponds with the approximate percentage of staff time allocated to the project. The advertising/marketing line includes advertising for interns to complete the project. These lines, as well as the line for training meetings, tools and supplies, and communications remain constant in the minimum and maximum budget variations.

A potential grant from RGGI will be supplemented with cash and in-kind contributions, including about \$33,000 in applicant in-kind donations of time, travel and services. Parts of other foundation grants will be applied to this project, to the tune of about \$14,000. In addition, participant contributions will be collected from the towns selected for this project. Each town will be asked to defray 10% of the cost of their energy audit: towns receiving Decision Grade audits would be asked to contribute about \$98, while towns receiving more exhaustive Investment Grade audits would be asked to contribute about \$650. This is intended not only to supplement RGGI funds, but also to increase community buy-in and raise awareness; for example, asking a local business to underwrite the town contribution could create a new ally, or holding a bake sale at a local park could increase project exposure in the community. This fee will automatically be waived for any participating community with a socio-economic ranking from the New Hampshire Community Development Finance Authority in the lowest third of the state. On a case-by-case basis, the project team will also consider waiving the fee for communities that are able to provide significant in-kind support for the project through donations of manpower, supplies or expertise.

## 7 Applicant Qualifications

The collaborators on this project have a great deal of experience in conducting inventories and audits, as well as designing community education and outreach efforts. CA-CP has successfully worked with dozens of municipalities to complete inventories, including Pittsburgh, PA; Maplewood, NJ; and Portland, ME; along with the 35 small rural towns within the Southwest Regional Planning Commission service area and LECs throughout the state on a regional basis. Jeff Taylor, president of Jeffrey H. Taylor & Associates, has over thirty years of planning experience in New Hampshire, including serving as Director of the New Hampshire Office of State Planning for Governors Gregg, Merrill, and Shaheen. Cameron Wake is Director of Carbon Solutions New England and a Research Assistant Professor in the Institute for the Study of Earth, Oceans, and Space at the University of New Hampshire. Most recently, he served on the New Hampshire Climate Change Policy Task Force and lead the technical analysis of the potential greenhouse gas reduction and economic benefits of action items described in the NH Climate Action Plan. SDES's expertise lies in providing adaptive and innovative energy solutions to residential, commercial, industrial, and institutional energy users looking to increase energy-efficiency, reduce related costs and diminish environmental impacts. SERG and VC have worked together for several years with LECs in the Upper Valley. Resumes for key personnel can be found in the appendices.

## 8 Additional Information

CA-CP, the coordinating applicant in this proposal, helps create pragmatic and scalable on-the-ground solutions that make a real difference; builds broad-based civil society coalitions that bring differing skills and interests together to leverage larger change; and frames our message so

that it responds to people's existing priorities. We put an unusually high premium on listening to stakeholders, seeking out and supporting social and institutional leaders, learning from failures as well as successes, and effectively communicating to diverse audiences.

Our programs have resulted in million of tons of greenhouse gas emissions abatement and we have created new models for local engagement, nurtured a diverse network of partner institutions, invented tools and resources that have gained traction nationwide. Perhaps our biggest achievement to date has been the success of our "Campus Carbon Calculator", a software tool that universities use to assess their carbon footprints. Created in 2001, the Calculator is now used in more than 3,000 colleges, and is acknowledged as the standard tool within the field of campus sustainability.

CA-CP served as the organizing and managing organization of the Carbon Coalition, New Hampshire Citizens for a Responsible Energy Policy. During our campaign over 300 Carbon Coalition volunteers brought the New Hampshire Climate Change Resolution to Town Meeting in 2007; we succeeded in securing endorsement of this resolution from over 40 organizations, business and civic associations in New Hampshire as well as nine newspapers. The resolution asked selectmen to "consider the appointment of a voluntary energy committee to recommend local steps to save energy and reduce emissions." The Local Energy Committee movement that has emerged in New Hampshire is a legacy to the work of the volunteers, who were recognized in 2007 in a proclamation from the Governor and Council.

What people have said about CA-CP:

*"CACP is a key partner: innovative, collaborative and responsive."* Tom Kelly, Chief Sustainability Officer, University of New Hampshire

*"CA-CP has pioneered a series of extraordinarily groundbreaking programs... for Temple, along with many other towns in our area, it was the spark that evolved into a vehicle for genuine change--our local energy committee."* Bev Edwards, Chair, Temple Energy Committee.

*"The work of CA-CP... has been invaluable to the 614 [college and university] presidents that have made a commitment to becoming climate neutral institutions..."* Tony Cortese, President, Second Nature

*"Clean Air -Cool Planet is the most effective institution I have found in providing practical innovative solutions."* Zach Smith, Wright Center for Science Education, Tufts University

## 9 Letters of Commitment

Please see the appendices section for letters of commitment from each partnering organization mentioned in the above proposal.