

Capital Region Climate Smart Communities Program Execution Plan

Updated Report for Year Two

Prepared for

**The New York State
Energy Research and Development Authority**
Albany, NY

Prepared by

The Capital District Regional Planning Commission
Albany, NY

and

VHB Engineering, Surveying and Landscape Architecture, P.C.
Watertown, MA

and

Climate Action Associates, LLC
Watervliet, NY

NYSERDA
September 2013
Agreement No. 24253
PO No. 28560

Table of Contents

NOTICE	3
INTRODUCTION.....	4
Overview	4
Status of Climate Smart Communities in the Capital Region	4
GREENHOUSE GAS EMISSIONS INVENTORY	5
CONNECTING WITH CLIMATE SMART COMMUNITIES	6
Program Kickoff and Formation of Capital Region CSC Council.....	6
Region-wide Engagement Process.....	8
Direct Engagement and Technical Assistance to CSCs.....	9
Community Profiles	10
In-Person Consultations.....	10
Custom Service Strategies	11
Sample Services Offered.....	11
Summary of Custom Service Strategies Developed.....	13
Guidance Documents.....	14
Coordination of Year Two Activities	14
Coordinating with the NY Energy Smart Communities and EDGE Program	14
Marketing.....	15
RECRUITMENT	16
ANCHOR PROJECTS	17
TRACKING AND REPORTING	17

NOTICE

This report was prepared by the Capital District Regional Planning Commission in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

INTRODUCTION

Overview

The following report will serve as a roadmap for the Capital Region Climate Smart Communities Pilot Program (Pilot). The Pilot is designed to be a three-year grant program. Funding was provided for year one, and partial funding has been allocated for Year 2. This program execution plan has been updated upon completion of year one of the program to include the tasks to be undertaking in year two. The Pilot grant was awarded to the Capital District Regional Planning Commission (CDRPC) by the New York State Energy Research and Development Authority (NYSERDA). To carry out the Pilot, CDRPC has partnered with a consultant team consisting of VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB), and Climate Action Associates, LLC (CAA).

The overall purpose of the Pilot is to provide technical support to the communities within the Capital Region that are participating in the New York State Climate Smart Communities (CSC) program. The CSC program is an interagency effort of NYSERDA, the New York State Department of Environmental Conservation (NYDEC), the New York State Department of State (DOS), New York State Department of Transportation (NYDOT), and the New York State Public Service Commission (PSC). Local governments initiate participation in the program by passage of a resolution to adopt the CSC pledge. The pledge describes ten areas of climate mitigation and adaptation action. Climate Smart Communities are free to develop their own specific programs within the ten action areas.

The Pilot includes a Program Execution Plan (this document), a Greenhouse Gas Emissions Inventory (completed), marketing and outreach, region-wide and in-person training, the development of community profiles, in-person consultations and custom service strategies, and summaries of model anchor projects. These initiatives will be described in more detail below.

Status of Climate Smart Communities in the Capital Region

The Capital Region covers the counties of Albany, Columbia, Greene, Rensselaer, Saratoga and Schenectady, and is comprised of 126 local governments. As of September 1, 2013, there were 17

local governments that adopted the CSC pledge; they include the cities of Albany, Cohoes, Rensselaer, Saratoga Springs, Schenectady, Troy and Watervliet; the towns of Bethlehem, Cairo, Clifton Park, Copake, East Greenbush, Hunter, Jewett, and Niskayuna; and the counties of Albany and Schenectady (see Climate Smart Communities Map on page 6).

GREENHOUSE GAS EMISSIONS INVENTORY

During year one of the Pilot a greenhouse gas (GHG) emissions inventory was completed for the region. The inventory computed regional direct and indirect emissions and apportioned them to all 160 cities, towns, villages, and counties in the eight-county Capital District Regional Council Economic Development region. In order to standardize GHG emissions inventories across pilot regions in NY State, the pilot team participated with other Pilot regions in conference calls and exchanged ideas and information to reach consensus on the appropriate GHG protocol to utilize. The GHG inventory also entailed meetings, coordination and the collection of data from key partners, which included the region's utilities, National Grid, Green Island Power Authority, Central Hudson Gas and Electric, and NYS Electric and Gas; the Capital District Transportation Committee (CDTC); the region's Metropolitan Planning Organization; Cornell Cooperative Extension; NYSDOT; NYSERDA; NYSDEC; the Energy Information Administration (EIA); and other data sources. The inventory is available at www.cdrpc.org.

The municipal-level components of the regional GHG emissions inventory have been supplied to CSC participants as a planning tool. During year two the following activities and support will be provided to communities to help them make use of the GHG inventory:

- Develop a strategy for managing the baseline inventory data in the future, including support for web-based products.
- Develop custom community GHG profiles for CSC participants to present results of the Regional GHG Inventory in a meaningful way.
- Perform outreach and support on the Regional GHG Inventory, including delivering presentations, papers, and holding meetings with regional stakeholders as needed.
- Act as the CSC designated liaison to interact with utilities related to local operations inventory data. Develop strategies to help utilities and CSCs exchange information.
- Explore, analyze, and present the GHG/energy/land use nexus. Work with partners, such as CDTC, to incorporate GHG considerations into its updated long range transportation plan

and to develop protocol to attribute a GHG footprint to transportation demand caused by communities and not by what happens to pass-through them.

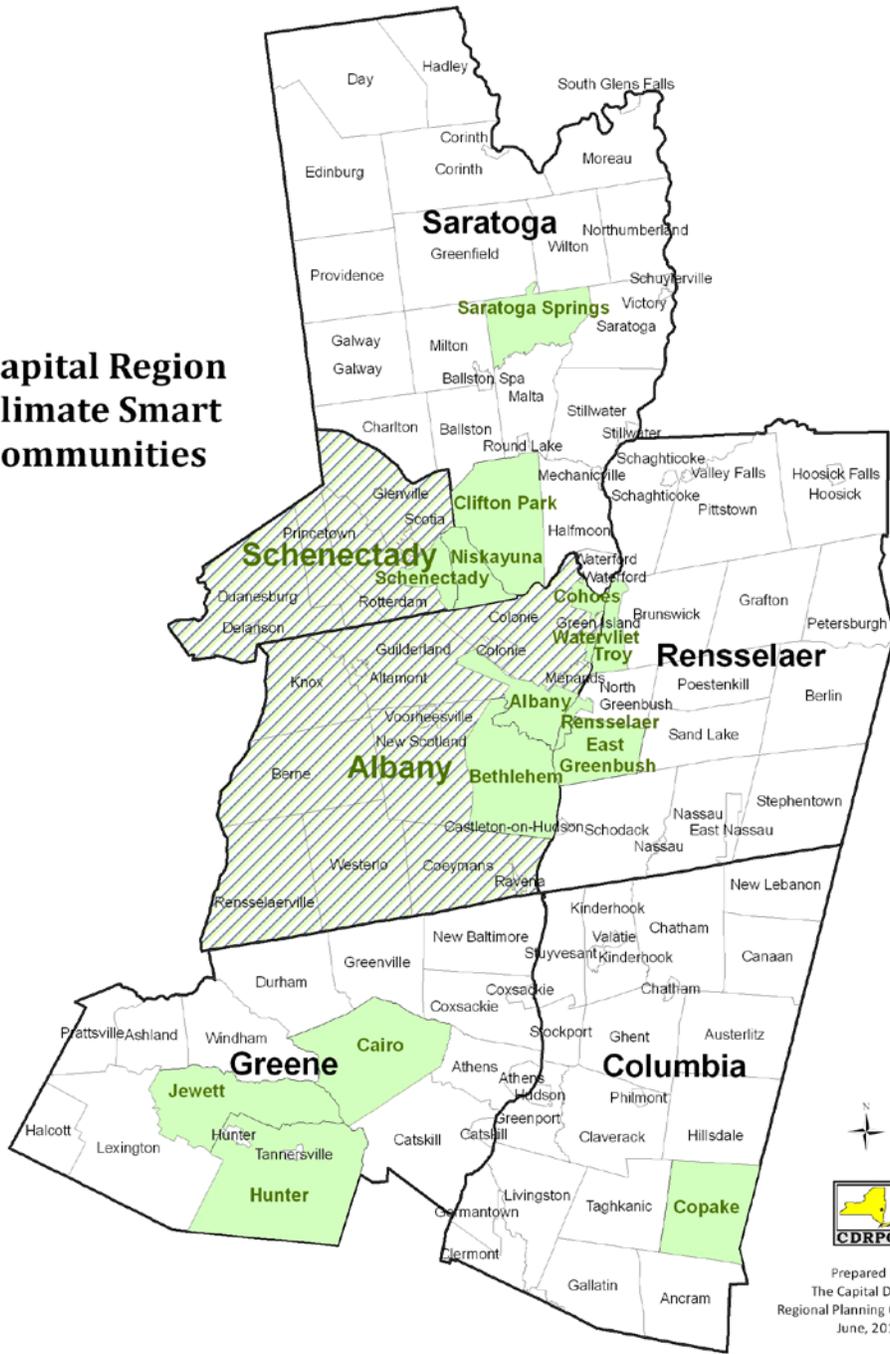
CONNECTING WITH CLIMATE SMART COMMUNITIES

Program Kickoff and Formation of Capital Region CSC Council

A formal kickoff meeting for the Pilot was held on June 20, 2012. The meeting was convened at Hudson Valley Community College. The meeting was scheduled to follow a day-long planning and zoning training conference for local officials sponsored by CDRPC. A Climate change session was held as part of the conference and included presentations on the CSC program, the Cleaner, Greener Communities Regional Sustainability Plan initiative, the Energy Smart Communities Program, and land-use patterns in the Capital District. The CSC participants in the region were invited to attend this session, which was directly followed by the kickoff meeting. At the meeting, the region's CSC participants were introduced to each other and were asked to describe why their communities were motivated to take the CSC pledge, what initiatives they had taken so far to address the pledge elements, and what they hoped to gain from the CSC Pilot. The concept of establishing a "Capital Region Climate Smart Communities Council" (Council) was discussed and agreed to. The Council met twice during year one to share program experiences and will be convened twice during subsequent years as well. The Council was also invited to attend three training sessions during year one and will be provided the opportunity to attend three trainings during each subsequent year of the program. The Council will reconvene in the fall of 2013 at which time a training session (topic to be determined) will also be held.

In addition to the information provided during Council meetings, the input offered by the communities during in-person consultations helped to update the community profiles and was also incorporated into the custom service strategies, both of which are discussed in subsequent sections below. Details about training sessions are also discussed below.

Capital Region Climate Smart Communities



Region-wide Engagement Process

The Pilot will continue to engage in region-wide outreach during year two that was undertaken during year one, including participation at conferences and webinars, and participation in regional sustainability initiatives. As noted above, the June 20, 2012 training session that was held at Hudson Valley Community College (HVCC), which utilized an established and highly attended regional training forum to expose local planning and zoning officials to the CSC program; the Cleaner, Greener Communities program; the Energy Smart Communities program; and the issues associated with climate change, is an example of such outreach. A second conference training program was held on October 4, 2012 with sessions focusing on climate adaptation (flooding mitigation and green infrastructure solutions) and walkable communities. CSC participants were invited, though the sessions were open to all conference attendees. On April 19, 2013, the CSCs met again for a training session and a roundtable discussion to share year one program experiences. This meeting was held at the offices of CDRPC. The training session was on climate adaptation. In addition to the adaptation training and roundtable discussion, the Council heard a brief presentation about the Capital District Clean Cities Initiative and they were invited to participate in this initiative. The Pilot will continue to use this semiannual forum during year two to market the CSC program and to offer direct education and training programs about climate change to local planning and zoning officials. The first training session of year two will be held in the fall of 2013 at the CDRPC office and will coincide with the first Council meeting of year two. A second CSC training will be held at Union College on January 31, 2014 as part of a regional conference on climate change.

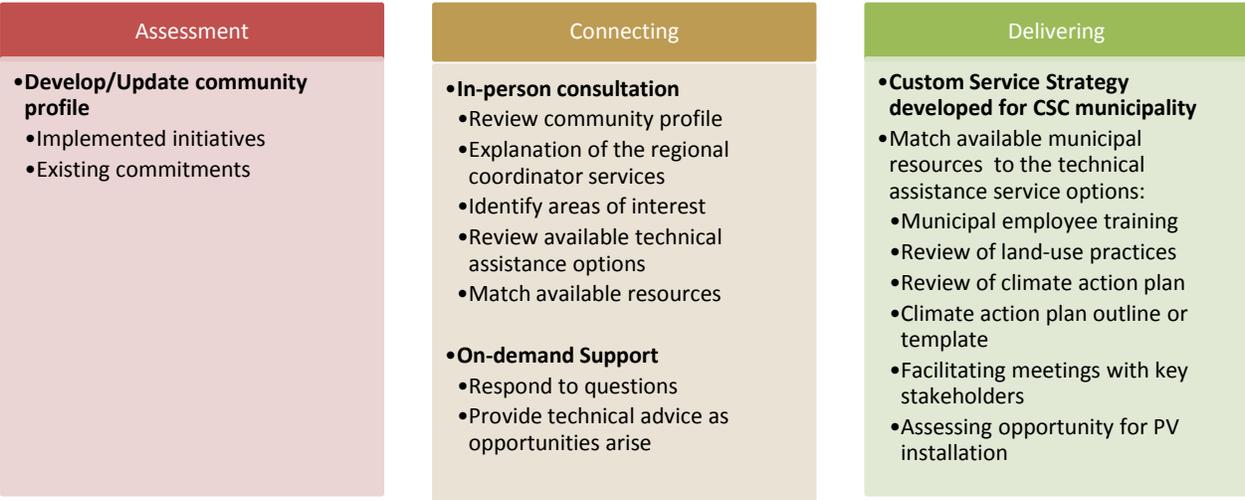
The Pilot will take advantage of existing statewide webinars developed for the CSC program by promoting them through CSC email lists, and the CDRPC website. The Pilot will also help coordinate with other regional and statewide programs. We will participate and help coordinate workshops that promulgate the smart-growth land-use tools being developed by NYSERDA as part of the CSC program. We have had discussions with Rutgers University, the consultant charged with developing these tools, who offered suggestions about best practices that could be successfully utilized in our region, and CDRPC provided comments on the draft version of the land use tools.

We will leverage CDRPC's participation with other regional entities and programs to cross-fertilize program initiatives that are focused on sustainability by sharing information about climate change issues, and by working to further mutual sustainability goals, particularly related to land use and development. CDRPC is currently engaged in water-quality and watershed planning for the Mohawk River Basin, and we will be assisting in the incorporation of flood mitigation, green infrastructure, and smart-growth elements into that plan. CDRPC is also engaged on the Capital District Transportation Committee (CDTC) Planning and Policy Committees, the Bike and Pedestrian Taskforce, and numerous CDTC "Linkage Study" advisory committees. Linkage Studies are local

smart growth grants that promote more walkable and bikeable communities and more sustainable land use and transportation practices. We will be participating in CDTC’s long range transportation plan update and will be seeking ways to incorporate climate and energy considerations into the policies identified in the plan. CDRPC is also involved with the NYS Department of Health’s Healthy Community program, which is also promoting walkable and bikeable communities. CDRPC also participated on five technical committees as part of the Capital Region Sustainability Plan and continues to provide significant technical support to the Capital District Regional Economic Development Council. VHB was also part of the consultant team that developed the regional sustainability plan. We believe that the cultural and political shift necessary to address climate change can be best addressed by the cross-fertilization of programs that share mutual sustainability goals.

Direct Engagement and Technical Assistance to CSCs

A major part of the Climate Smart Communities Coordinator Pilot Program involves direct engagement with each existing CSC. The direct engagement process includes three elements: 1) creating/updating community profiles; 2) face-to-face meetings with CSCs; and 3) developing and delivering custom service strategies. This framework allows for the project team to provide quality services that respond to each community’s individual needs. The chart below outlines the process.



The above framework was carried out in year one and will be repeated in year two. CDRPC will annually conduct an in-person consultation and develop a custom service strategy or follow-up strategy based on the varying needs of the CSC participants. Community profiles will be developed as new communities take the CSC pledge and updated on a regular basis throughout the Pilot.

Community Profiles

To begin the community assessment phase, the project team conducted background research on the progress each community has made in achieving the ten CSC pledge elements. In addition to the information provided by NYSERDA and NYSDEC, desktop research was conducted on every current CSC to determine and confirm what had been achieved and to collect supporting information, including greenhouse gas emissions inventories, climate action plans and other documentation. An account was created for each community in a robust project tracking tool. This project tracking tool was secured to manage the project team's interaction with existing and potential CSCs. The project tracking tool is operated by VHB.

Based on the information that was collected, a community profile was developed for each CSC participant. Sixteen community profiles were created during year one. These profiles include all pertinent information on the current climate protection efforts and serve as documentation of the status of each CSC participant in addressing the ten elements of the CSC pledge.

The community profiles were provided to each CSC two weeks prior to the initial in-person consultation. This allowed the local government's staff time to provide any missing information or correct any errors. In addition, these profiles enabled community staff and officials to see what information is readily available about their CSC pledge efforts. The profiles were used as a foundation for the in-person consultation discussions on which types of technical assistance would best meet the needs of each CSC. The community profiles will be updated during year two to reflect new activities undertaken by the CSCs.

In-Person Consultations

In-person consultation meetings were offered to the existing Climate Smart Communities in the Capital Region during the first year. Thirteen in-person meetings were held during year one. These meetings allowed the project team to introduce the Climate Smart Communities Pilot Program and the project team, review their community profile and each community's progress toward achieving the pledge elements, review current initiatives and projects that they are working on, identify areas where they need assistance on accomplishing their climate protection efforts, identify what resources they have available, and determine a customized approach for meeting their needs.

CDRPC sent an invitation to the highest elected official and (where applicable) the primary liaison for the CSC program to schedule the in-person meeting. Meetings were scheduled with the elected official, staff and volunteers working on the local government's climate protection efforts. The meetings lasted approximately one to two hours. The community was presented with a menu of technical assistance options focused on bringing the community to the next level of activity and closer to achieving the overall CSC goals. All information gathered during the in-person meetings

was processed and used as a basis to create a customized service strategy (see below) that met the desires and needs of the CSC. We will attempt to schedule additional in-person meetings with each of the CSCs during year two to revisit their progress on addressing the pledge elements, revisit their service strategies, and identify additional tasks in which we can provide assistance.

Custom Service Strategies

Each community that we met with during year one received a custom service strategy within two weeks of the in-person consultation. These strategies summarize the in-person meeting and outline what the action item is, how it would be delivered, who will provide it, and when it would be completed. The strategy provided to each CSC was based on each community's needs and priorities as expressed in the in-person consultation meeting. Each community's strategy also included a defined timeline. We ask that each community have the strategy signed by their chief elected official and returned to us in order to commence developing and delivering the Strategy.

Sample Services Offered

During the in-person meeting the project team discussed a variety of technical-assistance options that could be provided. The examples of potential technical-assistance options listed below were identified as priorities by existing CSC participants in the Capital Region at the coordinator Pilot program kickoff meeting.

- **Municipal Employee Training**—The project team will work with the CSC on the development and implementation of staff trainings to introduce the behavioral changes necessary to reduce energy consumption in municipal operations.
- **Review of Land-use Practices**—Members of the project team will be available to review existing development patterns, comprehensive plans, and land-use laws to ensure that they are structured in a way to meet the goals of the CSC. Where appropriate the project team will recommend modifications to existing land-use practices. The team's knowledge of national smart-growth best practices will allow them to provide insight into the strengths and weaknesses of existing practices.
- **Energy Planning**— The team will assist municipalities in understanding their overall costs for electricity, natural gas, transportation fuels in their operations and help them create targets and strategies to reduce their costs and reduce GHG emissions
- **Municipal Operations Greenhouse Gas Emissions Inventory Data Collection Templates and Guidance Document**- A template to assist with the collection of data relevant to a greenhouse gas emissions inventory and a guidance document

providing information on how to conduct a greenhouse gas emissions inventory for municipal operations.

- **Community GHG Inventory Template.** Pulling from the regional GHG inventory, the team will be able to provide, in a standard template form, a community's complete Tier II GHG inventory for 2010. The team will also provide guidance on updating and improving the inventory where possible, and on using it to develop a community-wide climate action plan.
- **Climate Action Plan Outline/Template**—A climate action plan template, a menu of effective climate protection strategies that are appropriate and applicable to the region, will be available to the CSC participants. In addition, other climate action planning resources available will include information and tools related to specific components of the climate action plan development process and how to identify funding sources to initiate a more formal climate action planning process.
- **Climate Action Planning**--Members of the project team will be available to review existing climate action plans to ensure they are structured to meet the goals of the CSC program. The team's knowledge of national best practices in climate action and adaptation will allow it to provide insight into the strengths and weaknesses of existing plans.
- **Facilitating meetings with key stakeholders**—The project team will work with municipalities to organize meetings with the key stakeholders necessary to help achieve their CSC goals. The team will also assist the CSC on understanding how to leverage volunteer committees and how to get the most out of community workshops.
- **Assessing opportunity for PV installation**—The project team can provide CSC members with a review of existing facilities and their potential for supporting PV installations. In addition the project team can provide energy savings estimates along with the associated reduction in greenhouse gas (GHG) emissions.
- **Network Support**—The project team will be available on-call to answer questions and provide guidance to the CSC participants as needed.

Summary of Custom Service Strategies Developed

Below is a summary of the Custom Service Strategies developed under year one of the Pilot.

- **City of Albany:** Develop a document outlining the next steps for creating a Green Business Certification Program which would build on their existing Green Business Program.
Status: Completed.
- **Albany County:** Identify financing options for Albany County capital projects.
Status: Completed.
- **Town of Bethlehem:** Create a guidance document describing three options for green building code/policies/incentives, including best practices and implementation recommendations.
Status: Completed
- **Clifton Park and Saratoga Springs:** Conduct in-person energy efficiency in O&M training and accompanying resource guide.
Status: Completed. Training held April 2, 2013 in Saratoga Springs.
- **City of Cohoes:** Conduct a local government operations inventory.
Status: Inventory is 90% complete.
- **Town of East Greenbush:** Conduct a local government operations inventory.
Status: In process.
- **Town of Hunter:** Develop a “how-to” guide on installing a solar photovoltaic system on a landfill.
Status: Completed
- **Town of Niskayuna:** Assist with redefining the role of the Conservation Advisory Council to serve as the primary vehicle for the Town’s climate protection efforts.
Status: In process.
- **City of Rensselaer:** Investigate green financing programs to encourage more energy efficiency businesses to locate in the city.
Status: Completed.
- **City of Schenectady:** Develop an educational campaign for water conservation.
Status: Completed.
- **Schenectady County:** Complete Portfolio Manager Energy Benchmarking Services.
Status: Completed
- **City of Watervliet:** Research energy efficiency education and outreach strategies for multifamily homes.
Status: Completed.

Guidance Documents

In some instances the service developed resulted in the creation of a guidance document. Under our year-one program these included:

- A facilities operations and management guidebook
- A guide for installing a solar PV system on a landfill
- A guide to green financing programs
- An education campaign for water conservation
- An energy efficiency outreach strategy for multi-family housing.
- A green business certification program.
- Water conservation education campaign.
- A guide to municipal financing options.

Although these documents have been developed for individual communities, they will benefit all of the local governments in the region. The documents are available at www.cdrpc.org.

Coordination of Year Two Activities

To jumpstart year two of the Climate Smart Communities Pilot Program, the project team met and reviewed the progress from year one, which included analyzing the following: the local governments that we held in-person consultations with, the priorities that were identified at those consultations, the custom service strategies that were developed, the completed strategies, and the primary staff or elected official that we are in contact with. The team compiled this information into a spreadsheet and determined who we should meet with in the Fall or Spring and what our potential focus might be. For example, the town of Clifton Park has been focused on understanding their energy use and collecting that information to make more energy efficient decisions for their local government operations. However, they do not have a local government operations greenhouse gas (GHG) emissions inventory which would provide them an essential baseline of information about where they can more wisely focus their limited resources and time. The team made the decision that, where possible, Climate Action Associates would accompany CDRPC and VHB at the in-person consultations to discuss the possibility of conducting a local government operations GHG inventory. Table 1, which is included in Appendix A, summarizes the proposed schedule of in-person consultations and next steps with each of the existing Climate Smart Communities in the Capital District.

Coordinating with the NY Energy Smart Communities and EDGE Program

As part of the Pilot, CDRPC coordinated outreach and technical assistance activities with the NY Energy Smart Communities program to leverage the value of both programs. CDRPC held meetings

to discuss mutual program goals with representatives of Courtney Strong, Inc., who was the NYSERDA Energy Smart contractor for the areas that includes the Pilot region. In addition, CSC participants were notified at the Pilot in-person meetings that they may be contacted by the Energy Smart contractor. Midway through our Pilot a different contractor was chosen for the next phase of the Energy Smart program, which is now called the Economic Development Growth Extension [EDGE] program. CDRPC met with the new contractor of the EDGE program (the Center for Economic Growth [CEG]) on March 25th 2013 and we shared information about our programs.

Marketing

In order to raise the visibility of the Climate Smart Communities program and climate change issues, a marketing campaign will be developed and implemented throughout the Pilot. The marketing campaign will include the use of a the Capital District Regional Planning Commission website (cdrpr.org), the development of direct marketing pieces (such as a “pocket pledge” tailored to the Capital Region), direct community outreach, as well as establishing a presence at regional activities and events.

A dedicated Climate Smart Communities Pilot Program webpage will be launched as the first task of our year-two program. The project team will create a CSC Pilot Program dedicated page at www.cdrpc.org, CDRPC’s current website. This site will describe the CSC Pilot Program, promote the successes of CSC participants, provide information on upcoming trainings and webinars, provide information to the general public, and include copies of the materials developed under the Pilot, such as the GHG emissions inventory, community profiles, custom service strategies, maps, and other resource materials; and in general will increase the visibility and awareness of the CSC program. A preliminary CSC Pilot web page is targeted to be launched in October 2013 and will be expanded and enhanced as program materials become available.

As noted, the training sessions held in conjunction with CDRPC’s Planning and Zoning workshop (June 20, 2012 and October 4, 2012) included specific sessions related to climate and energy, however the conferences also included sessions on a variety of planning and zoning topics and were attended by many communities that are not climate smart communities. Therefore, the conferences were also used to market the Climate Smart Communities program to other potential communities. The climate and energy sessions were open to all conference participants and brochures explaining the CSC program were available at the conference registration desk. CDRPC also used its ongoing interaction with other communities in the Capital District to market the CSC program to potential new members.

Another primary method of marketing this program will be through identification of and participation in local, regional and even statewide events such as workshops, conferences, seminars, and meetings where the project team can promote the CSC program to local governments and other key stakeholders. The project team is connected to several active professional networks with primarily municipal audiences such as the American Planning Association, the Congress for the New Urbanism, and the American Public Works Association. Members of these networks oftentimes serve as the CSC elected official or staff person. Through these efforts, regional knowledge and interest in climate change issues will be expanded across a broader range of stakeholders, including municipal officials, businesses, academia and the construction industry.

RECRUITMENT

The Pilot focused most of the first year on helping the existing CSC participants advance in their efforts to implement the pledge elements. However, the marketing and outreach efforts of the Pilot exposed many more communities to the CSC program, opening the possibility of additional regional communities expressing interest in, and potentially joining, the CSC program. CDRPC's conference training sessions (which are held twice-yearly and usually attended by over 200 local planning officials) will be open to non-CSC communities and marketing materials that describe the CSC program will be available at these sessions. The website described above will also help to advertise the CSC program and expose it to other potential members. We will take advantage of other forums and planning initiatives in which CDRPC is involved to highlight the benefits of the CSC Pilot to non-CSC members. In addition, CDRPC, through its various work program initiatives, is highly regarded in providing planning support services to the communities in the Capital Region. We will use our well established network to promote and recruit communities to participate in the program.

During year two we will promote the CSC program and encourage new communities to join the program. We will reach out directly to select communities that may be likely candidates, such as regional cities not yet part of the program (Hudson and Mechanicville) and high-population/fast-growing suburban towns (such as Guilderland, Glenville, Rotterdam, Colonie and Malta). We will also explore the possible interest of Saratoga and Rensselaer counties. We will coordinate our recruitment efforts with NYSDEC.

ANCHOR PROJECTS

During year one the Pilot project team queried CSC participants to identify appropriate anchor projects. We identified several potential projects that could warrant wider replication in other communities. These candidate projects include:

1. Quail Street Complete Streets Project -- Albany
2. Curbside Organic Waste Recycling -- Watervliet
3. Bethlehem's Waste Water Treatment vulnerability assessment and associated upgrades
4. Albany's Green Business Certification Program
5. Town of Hunter Bio-Grass Energy Project

Under year one we completed write-ups of the first two projects. We also began research on the other three projects, which will be developed into case studies for year two.

TRACKING AND REPORTING

Through the Climate Smart Communities Coordinator Pilot Program, the project team will continue to engage with NYSERDA and NYSDEC, as well as other regional coordinators to share best practices and lessons learned and to provide feedback and evaluation of the program while it is being implemented.

The project team will comply with all reporting and submission requirements established by NYSERDA and included in the Pilot contract. The project team will participate in all quarterly Pilot Program conference calls. The team will submit annual reports summarizing the successes and challenges of the CSC Program and including recommendations for modifications to the program moving forward; a list of communities that have received in-person consultations; a progress summary of each community in accomplishing specific pledge elements; conferences and events attended and presentations, trainings and webinars offered; and a summary of CSC interaction (calls, meetings, workshops attended, etc.).