



# Climate Smart Communities



# Climate Action Planning Guide

The Climate Action Planning Guide was developed through the Climate Smart Communities Regional Coordinator Pilot Program to assist local governments in developing strategies for reducing greenhouse gas emissions. Completing a climate action plan is an important part of the CSC program under Pledge Element 2: Set Goals, Inventory Emissions, and Move to Action.

March 2014



# Table of Contents

- Introduction.....2
  - Climate Smart Communities Program Overview .....2
    - Climate Smart Communities Pledge.....2
    - Climate Smart Communities Regional Coordinator Pilot Program .....3
- Climate Action Plan Guide Overview .....3
  - What is a Climate Action Plan?.....3
  - Why is a Climate Action Plan Important? .....5
  - Steps for Creating a Climate Action Plan.....5
- Step 1: Determine Leadership & Climate Action Plan Framework.....6
  - Create a Climate Action Plan Advisory Committee.....6
  - Determine the Scope of the Plan .....6
- Step 2: Develop Communication and Engagement Strategy .....7
  - Engage Local Government Officials and Staff .....7
  - Engage Local and Regional Stakeholders.....8
  - Collect Community Input.....8
- Step 3: Complete and Analyze Baseline Assessments..... 11
  - Local Government Operations GHG Emissions Inventory ..... 11
  - Community GHG Emissions Inventory..... 12
  - Other Baseline Data and Indicators..... 12
  - Assess Past and Existing Efforts ..... 12
- Step 4: Identify Goals and GHG Emissions Reduction Targets ..... 12
  - Identify Goals..... 12
  - Set Emissions Reduction Targets ..... 13
  - Climate Change Goals in New Rochelle, New York ..... 13
- Step 5: Identify Existing and Potential Initiatives..... 14
- Step 6: Quantify Potential Impact of Initiatives ..... 15
  - Tools for Quantifying Initiatives ..... 17
- Step 7: Prioritize Initiatives..... 17
- Step 8: Implement the Plan..... 18
- Step 9: Establish Metrics..... 19
- Step 10: Write the Climate Action Plan..... 20
  - Next Steps..... 22



Appendix A: Climate Action and Sustainability Plans ..... 23  
Appendix B: Climate Action Planning Resources..... 24  
Appendix C: Climate Adaptation Planning Resources ..... 25  
Appendix D: ENERGY STAR® Resources..... 26

---

## Introduction

### Climate Smart Communities Program Overview

In 2008, New York State established the Climate Smart Communities (CSC) program as a unique state and local partnership to reduce greenhouse gas emissions, save taxpayer dollars and advance community goals for health and safety, economic vitality, energy independence and quality of life. This partnership includes six New York State agencies that jointly sponsored the CSC Program, including the New York State Energy Research and Development Authority (NYSERDA), Department of State, Department of Environmental Conservation, Department of Health, Department of Transportation, and the Public Service Commission.

### Climate Smart Communities Pledge

Any local government in New York State can join the CSC program by adopting the voluntary [Climate Smart Communities pledge](#) to reduce greenhouse gas emissions and prepare for a changing climate to help protect public health and safety and support a secure economic future. The CSC pledge element framework guides local governments through the development and implementation of successful local climate action programs. The CSC program is designed to address ten focus areas, or “pledge elements,” outlined below:

1. Pledge to Combat Climate Change by Becoming a CSC
2. Set Goals, Inventory Emissions, & Move to Action
3. Decrease Energy Demand for Local Government Operations
4. Encourage Renewable Energy for Local Government Operations
5. Realize Benefits of Recycling and Other Climate Smart Solid Waste Management Practices
6. Promote Climate Protection Through Community Land Use Tools
7. Plan for Adaptation to Unavoidable Climate Change
8. Support a Green Innovation Economy
9. Inform and Inspire the Public
10. Commit to an Evolving Process



More information about the CSC program and pledge element framework is provided on the [New York State Department of Environmental Conservation website](#).



## Climate Smart Communities Regional Coordinator Pilot Program

In 2012, the State created the CSC Regional Coordinator Pilot Program to provide support to local governments in New York State as they work to address the CSC 10 Pledge Elements. The CSC program assigned CSC Regional Coordinators to deliver technical assistance to local governments that have adopted the CSC Pledge in four regions of New York State: Mid-Hudson, Long Island, Capital District and Central New York. This guide was created through funding from the Pilot Program.

## Climate Action Plan Guide Overview

This *Climate Action Planning Guide* was developed through the CSC Regional Coordinator Pilot Program to assist local governments in developing strategies that reduce greenhouse gas (GHG) emissions. Completing a climate action plan (CAP) is an important part of the CSC program under *Pledge Element 2: Set Goals, Inventory Emissions, Move to Action*. An effective CAP provides a comprehensive strategy for reducing GHG emissions across all sectors while supporting community goals for environmental health, economic prosperity, and quality of life. This guide will introduce the concepts behind climate action planning and provide the framework for developing a successful plan to reduce GHGs.

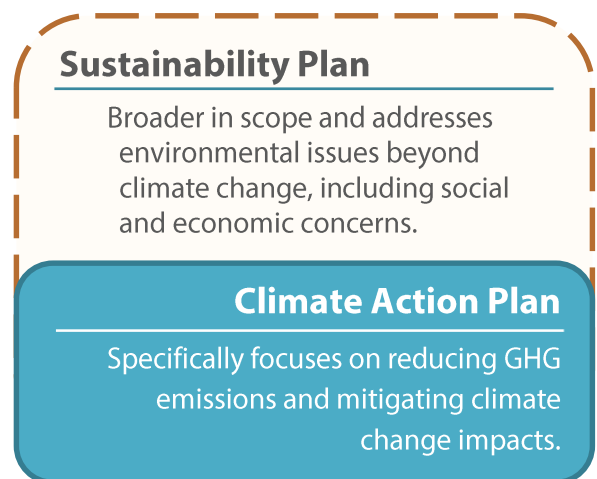
## What is a Climate Action Plan?

A climate action plan (CAP) is a strategy document that outlines a collection of measures and policies that reduce GHG emissions. Using the GHG emissions inventory as the foundation, a CAP defines GHG reduction goals based on local priorities for reducing emissions and provides the guiding framework for achieving those goals.<sup>1</sup> A CAP can be a standalone document or it can be integrated into an existing plan, such as a comprehensive plan or a sustainability plan.

### Climate Action Plan vs. Sustainability Plan

A climate action plan (CAP) lays out strategies that mitigate climate change and reduce greenhouse gas emissions. Sustainability plans, on the other hand, are much broader in scope and address environmental, economic and social considerations beyond those directly related to climate change. The goals and initiatives contained in a CAP are typically only one component of a broader sustainability plan; however oftentimes climate mitigation strategies have multiple benefits in other areas of sustainability.

Figure 1: Climate Action Plan vs. Sustainability Plan



<sup>1</sup> For more information on how to conduct a greenhouse gas inventory view the "*Climate Smart Communities Guide for Conducting a GHG Emissions Inventory: User's Guide for Local Government GHG Accounting Tool*"



Communities can incorporate the goals and initiatives related to climate mitigation into a sustainability plan.

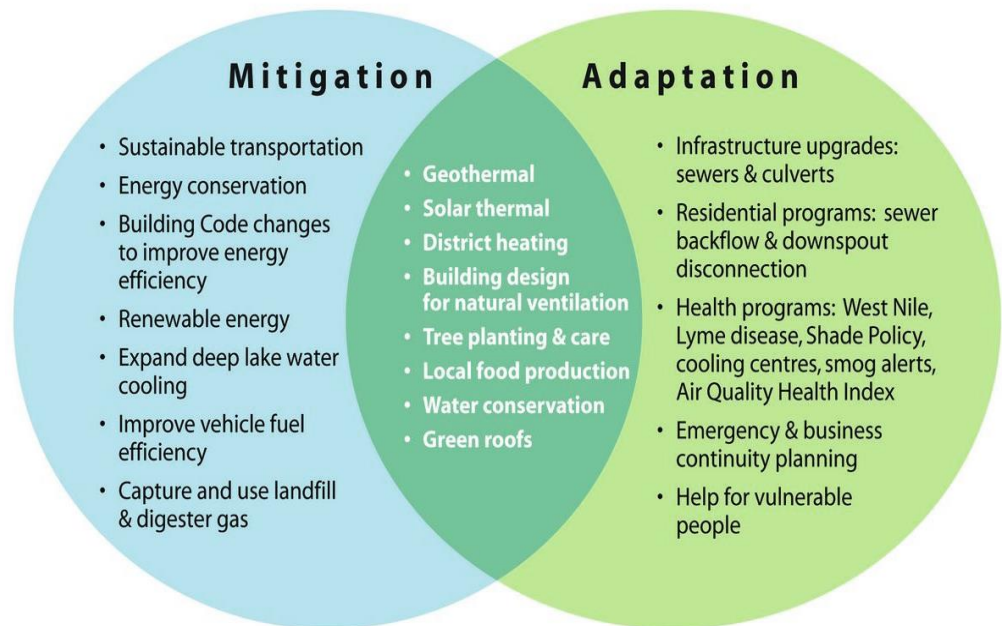
The steps outlined in this guide are not limited to developing a stand-alone climate action plan. Most of the steps in this guide can also be followed to develop climate mitigation goals and strategies that can be incorporated into energy action plans, sustainability plans or comprehensive plans. Steps 3 – 9 can be used to create specific goals and strategies for climate mitigation chapters for any plan. Additional tools and resources that can assist with developing a climate action plan can be found in [Appendix B](#).

### Climate Mitigation vs. Adaptation

Both *climate mitigation* and *climate adaptation* initiatives deal with climate change. The difference is that *climate mitigation* initiatives aim to reduce or prevent GHG emissions, such as installing solar panels or riding a bicycle instead of driving a car. In contrast, a *climate adaptation* initiative prepares a community for the unavoidable impacts of climate change, such as sea level rise or extreme weather events. Climate mitigation and climate adaptation initiatives are not always mutually exclusive and can have benefits in both areas as demonstrated in [Figure 2](#). For example, installing a green roof on top of a building decreases energy consumption (climate mitigation) while absorbing stormwater runoff during extreme weather events (climate adaptation). When developing a CAP, a community is encouraged to

include initiatives that provide both climate mitigation **and** adaptation benefits, such as those outlined in [Figure 2](#). This guide will focus on initiatives related to climate mitigation, but resources are provided to assist communities who are interested in furthering their efforts to include climate adaptation in [Appendix C](#).

**Figure 2: Climate Mitigation vs. Climate Adaptation**



**Mitigation:** the globally responsible thing to do

Actions that reduce the emissions that contribute to climate change.

**Adaptation:** the locally responsible thing to do

Actions that minimize or prevent the negative impacts of climate change.

Source: [Natural Resources Canada's Climate Change Adaptation Initiatives](#).



## Why is a Climate Action Plan Important?

By taking the Climate Smart Communities pledge, your community has already taken a significant step in the CAP process—making the commitment. This commitment demonstrates that your local government has acknowledged the threat of climate change and that you can play a role in reducing the proposed impacts. A strategic plan for climate protection is an essential tool for guiding your community to take effective action in climate change mitigation.

A CAP provides local governments with a framework that facilitates coordination across local government departments and community stakeholders when implementing initiatives from the plan. It helps to prioritize actions that should be taken to successfully reduce greenhouse gas emissions and serves as the roadmap for local governments as they implement municipal and community-wide programs, projects and policies.

## Steps for Creating a Climate Action Plan

Writing the text for a climate action plan is only one part of a larger planning process. To maximize success in implementing the plan, it is important to engage local government staff, elected officials, residents, businesses, and other community stakeholders. Engaging the public ensures that the goals and initiatives identified in the plan are desirable and practical for those individuals and entities involved with implementing them.

[Figure 3](#) outlines the climate action planning process. Although [Figure 3](#) shows each stage of the climate action planning process as separate steps, many of these steps overlap or happen concurrently depending on the community process. Crafting a CAP can take anywhere from six to 12 months based on staff capacity, availability of data and information, and level of public engagement.

**Figure 3: Steps for Climate Action Planning**





## Step 1: Determine Leadership & Climate Action Plan Framework

A key first step for the climate action planning process is to clearly define who is responsible for managing the development of the plan. This will typically be a local government, but a local government may form an advisory committee or assign a specific department or a staff person (e.g., a sustainability coordinator) to manage the overall process. The first responsibility of this person or group is to decide on the purpose and scope of the plan. Will this plan be focused on municipal operations alone, a community-scale plan, or both? In addition, local governments may want to consider a CAP that reaches beyond local boundaries, such as a countywide or regional plan. It is important to define the overall purpose of the plan, its audience, its timeline for action, and what results will come of it. This guide provides guidance on completing a local CAP for both government operations and the community, but much of its content can be applied to any level of climate action planning.

### Create a Climate Action Plan Advisory Committee



Establishing an advisory committee will help guide the overall climate action plan (CAP) process and create a platform for valuable feedback throughout the development of the plan. In some cases the highest elected official will assume responsibility for assigning individuals to an advisory committee to manage the overall process. Criteria for identifying individuals to serve on the committee can include knowledge of climate and sustainability topics, experience with project management and coordination, and experience with leading and facilitating public workshops. Invite stakeholders from the community that include residents, local government elected officials and staff, businesses, academia, philanthropic organizations, organized labor, faith-based groups, and other local interest groups.<sup>2</sup>

### Determine the Scope of the Plan



The first task of the advisory committee should be to determine the overall scope of the climate action plan (CAP). Details of the CAP framework can be adjusted throughout the planning process, but establishing focus areas during the beginning stages will help organize the planning process. Considerations should include whether the CAP will be for the entire community or if it will focus solely on municipal operations, or address both. The steps outlined in this guide will be applicable to all of these approaches.

Another consideration is integrating the CAP with other plans, such as comprehensive plans, economic development plans, and transportation plans. As mentioned earlier, most of the steps in this

**Figure 4: Example Focus Areas for the Town of Bedford**



Source: Town of Bedford Climate Action Plan

<sup>2</sup> DEC's How to Set Up a Climate Smart Community Coordinator or Task Force: <http://www.dec.ny.gov/energy/65489.html>



guide can also be followed to develop climate mitigation goals and strategies that can be incorporated into other plans, but identifying this approach at the beginning stages will help guide the process and organize all of the steps that follow.

While determining the framework for the CAP, the advisory committee should review existing local, county or regional plans, which may provide guidance and inspiration for the plan. One example includes the regional sustainability plans that were completed under the New York State [Cleaner Greener Communities](#) program in 2013. The advisory committee should also review relevant plans for their local government to identify similar focus areas and data that may be useful to local climate action planning. [Figure 4](#) is an example of the focus areas included in the Town of Bedford’s CAP. Additional resources are provided in [Appendix A](#).<sup>3</sup>

## Step 2: Develop Communication and Engagement Strategy



Communicating with and engaging local government officials, staff members and public stakeholders is an essential component of climate action planning. Successful climate action planning largely relies on public outreach and education on the planning process as well as incorporating stakeholders in the process of developing the plan. Municipal staff and community volunteers can play a key role in facilitating community outreach, organizing public meetings, conducting baseline assessments or helping draft sections of the plan. The advisory committee should develop a communication and engagement strategy to include the community in the development of the plan and to enlist their long-term support in taking steps to reduce greenhouse gas emissions.

### Engage Local Government Officials and Staff

Most likely, your CAP will include commitments on the part of your local government for community-wide climate mitigation strategies and goals related to improving the efficiency and sustainability of its operations. It is important to engage key government departments as stakeholders in the climate action planning process for a few reasons:

1. These are the people that will be implementing many of the initiatives recommended in the CAP. Their buy-in is essential.
2. They are experts in their field and know the surrounding community well. This will be helpful when conducting a baseline assessment.
3. They will have detailed knowledge about the method and resources needed to implement many of the initiatives.

**Figure 5: Examples of Local Government Key Staff**

	Invite Key Staff Members
<input checked="" type="checkbox"/>	Planners
<input checked="" type="checkbox"/>	Public Works Staff
<input checked="" type="checkbox"/>	Fleet Managers
<input checked="" type="checkbox"/>	Finance & Budget Staff
<input checked="" type="checkbox"/>	Emergency Management & Public Safety Staff
<input checked="" type="checkbox"/>	Human Resources
<input checked="" type="checkbox"/>	Water & Wastewater Staff
<input checked="" type="checkbox"/>	Other Municipal Facilities

[Figure 5](#) provides a checklist of local government staff to include in the climate action planning process.

<sup>3</sup> ICLEI - California Statewide Energy Efficiency Collaborative climate action plan template: [http://www.icleiusa.org/library/documents/SEEC\\_Climate%20Action\\_Planning\\_Templates.zip/view](http://www.icleiusa.org/library/documents/SEEC_Climate%20Action_Planning_Templates.zip/view)





## Engage Local and Regional Stakeholders

Engaging local and regional stakeholders is a valuable component of climate action planning and will help to ensure the plan is inclusive and accurately reflects the priorities of the community. Outreach strategies should target groups of individuals representing the various interests of the community, including residents, businesses owners (small and large), local industry leaders, educational institutions, regional planning agencies, state agencies, local school district partners, religious groups, and non-profit organizations. Establishing a relationship with these stakeholder groups will help to leverage resources, create opportunities to discuss the costs and benefits of mitigation actions and potentially develop new and innovative ways to build community resilience.

## Collect Community Input



Public input should represent diverse interests of the entire community representing all demographics from different neighborhoods and commercial sectors. Hosting public meetings and workshops is one of the most common methods for public stakeholder engagement. Strong leadership and effective facilitators are critical for capturing the ideas and opinions of participants at public meetings and/or workshops. There are multiple approaches that can be taken to engage attendees and it is important to select the best approach considering the time and resources required for each. Partnering with local and regional stakeholder groups can help to alleviate pressure and share meeting responsibilities. The following are some tips and options for collecting meaningful feedback to develop your CAP.

## Provide Context for the Plan at Workshops



In public workshops, it is important to outline the overall climate action planning process and emphasize the role of attendees in shaping the future of their community and set ground rules at the beginning to minimize potential conflicts. Baseline data should be provided during the meeting, including results of the GHG emissions inventory and other basic socioeconomic data, education statistics, housing data, employment data, health statistics, and/or environmental data to guide the discussions and help participants define the problems and potential solutions in their community. It can also help clarify any misinformation about perceived problems in the community that are not supported by the data.

## Facilitate Breakout Sessions to Manage Feedback



A common method of collecting feedback from the public is to host breakout sessions to discuss specific issues in smaller settings, and then reconvene to discuss and analyze as a group. To capitalize on small working groups or breakout sessions, it is helpful to prepare a short topic area summary to provide any background info needed to facilitate discussion around that focus area. When using this approach, it is important to delegate a scribe or note-taker to ensure that discussion topics and feedback can be analyzed at a later date when the CAP is being drafted. The leader or group facilitator should avoid the role of a note-taker to dedicate their full attention to managing discussions and the dynamics of a group. For additional tips on facilitating discussions at public workshops, please see [Figure 6](#).



## Create Group Polling Techniques



Interactive polling is a visually stimulating and engaging way to gather information anonymously from participants about concerns and priorities before transitioning to face-to-face discussions. PowerPoint presentation tools, such as Turning Point®, can collect polling results in real-time and display data on a projected computer screen to be shared and discussed at public workshops. Interactive voting at public meetings and workshops can also be accomplished without technologies like Turning Point®. For example, participants can vote on or prioritize initiatives and goals by placing dot stickers on posters that display various options and strategies. The advice of a trained and experienced meeting facilitator can be useful in selecting appropriate group techniques.



### Figure 6: Tips for Facilitating Discussions at Public Workshops

---

1. Outline the climate action planning process and focus areas.
2. Establish ground rules.
3. Delegate volunteers to take notes so that the facilitator can manage discussions.
4. Be sensitive to participants who have limited knowledge on climate change and sustainability.
5. Employ a combination of written and verbal feedback mechanisms to collect all opinions.
6. Repeat back what has been said by a participant(s) to ensure you have captured and summarized their comments accurately.
7. Manage group dynamics so that all opinions are heard and conversations are not dominated by one individual.
8. Keep track of time and re-direct conversations to adhere to the discussion agenda.
9. If comments are outside the scope of the CAP or discussion agenda, request the note-taker to document the comment or ask him or her to remind you after the meeting.

## Create a CAP Campaign



Another way to promote climate action planning in the community is to create an awareness campaign and challenge residents to submit creative suggestions for reducing energy use and associated GHG emissions. This campaign can utilize in-person workshops, snail mail, the media, and web-based options (see next section for virtual tools to facilitate this). A task force can be created to oversee campaign planning and determining the best mode(s) of



administering the awareness campaign and collecting responses. Consider all modes of communication including but not limited to the following:

- ✓ Posters, flyers, and marketing materials
- ✓ Local newspaper(s) advertisements
- ✓ Websites and other social media outlets
- ✓ Public radio broadcasts
- ✓ Public access channels or YouTube broadcasts
- ✓ Local news reports and programs
- ✓ Strategically placed *CAP Suggestion Boxes*

## Online Web Tools

Although public meetings and workshops play an important role in engaging the public, it is challenging to engage people from all sectors of the community in person. Web-based tools can be a convenient and low-cost method for centralizing information and remotely engaging community stakeholders. Websites are commonly used to host information and solicit feedback, and social media platforms such as Facebook, Twitter, and LinkedIn, are used to connect audiences of all demographics, and to inform and engage the public about future events or as they are happening. Residents, businesses and other stakeholders can learn about the climate action planning process, learn who is involved in the planning process, understand their role in climate protection initiatives and learn about upcoming educational events and meetings. Some tools, like MindMixer (see [Figure 7](#)), facilitate a two-way conversation between stakeholders, and allows the local government to collect the feedback and analyze it for inclusion in the CAP.





Local governments should consider staff capacity and expertise to build and maintain these sites or if a third party needs to be hired to build the site. Innovative methodologies for online engagement and crowd sourcing data are continually being developed. A few examples are provided in [Table 1](#).

**Figure 7: Example of MindMixer Interface**





**Table 1: Examples of Community Engagement Applications**

Applications	Description
	<p>Provides communities with online engagement tools that allow them to have more productive, collaborative conversations.</p>
	<p>Offers a fun and convenient way to participate in online brainstorming sessions, meetings, and workshops or charrettes.</p>
	<p>A game that makes planning playful, and gives everyone the power to shape the future of his or her community.</p>
	<p>Provides tools and expertise to nurture and engage your own community on the largest, most scalable, and integrated social platform of its kind.</p>

### Step 3: Complete and Analyze Baseline Assessments



As mentioned in [Step 1](#), it is important to begin the climate action planning process by determining the scope and framework for the CAP, which will largely be dependent on access to greenhouse gas (GHG) emissions data. Conducting a GHG emissions inventory will indicate which sectors are the greatest contributors of GHG emissions and establish a baseline from which to set goals and measure progress. The baseline GHG emissions inventory provides the data needed to prioritize actions that will offer the best return on investment, whether through cost, energy consumption, or GHG emissions reductions. The scope of a GHG emissions inventory can be completed for local government operations, the community, or both. The scope of the CAP should be consistent with the inventory to elaborate on existing data and develop implementation actions that will reduce GHG emissions within the relevant sectors.

#### Local Government Operations GHG Emissions Inventory



Local governments should develop a GHG emissions inventory for their government operations by selecting an appropriate baseline year, gathering data, and developing an inventory report. This analysis creates the platform to adopt a realistic GHG emissions reduction, energy use, and cost saving goals and prioritize actions in a climate action plan. The Climate Smart Communities Regional Coordinators developed a [CSC Local Government Operations Greenhouse Gas Emissions Inventory Tool](#) and [User's Guide for Local Government GHG Accounting Tool](#) to help communities conduct GHG emissions inventories for local government operations. For guidance on completing a GHG emissions inventory, see the *Climate Smart Communities Guide for Conducting a Local Government Operations GHG Emissions Inventory*.



## Community GHG Emissions Inventory



In 2011-2013, regional inventories were conducted through the [Climate Smart Communities](#) and [Cleaner, Greener Communities](#) programs throughout New York State for the baseline year of 2010. Inventories were developed at the regional level, and then allocated to the county, town, city, and villages within the region. Each regional inventory was developed using the [New York GHG Protocol](#), which was developed by the NYGHG Working Group to establish a consistent protocol for use throughout the state.

## Other Baseline Data and Indicators

GHG emissions are not the only baseline data that are useful to climate action planning. Other data can serve as indicators for climate and environmental impacts beyond GHG emissions reduction, especially if developing a broader sustainability plan. An example of regional sustainability indicators are provided in the [regional sustainability plans](#) developed under the Cleaner, Greener Communities program. Common focus areas for data collection include energy resources, water consumption, recycling rates, vehicle miles traveled, public transit ridership rates, renewable energy installation data, and employment statistics. Collecting this type of data will provide a more comprehensive view of community functions and will be helpful when identifying target areas for improvement, estimating impacts of climate change, implementing climate protection initiatives and tracking progress over time.

## Assess Past and Existing Efforts

A comprehensive CAP will not only account for GHG emissions data, but will also build on existing policies, plans and programs that have been accomplished to date. Assessing a community's baseline should include a list of past accomplishments and existing efforts related to climate change and the environment. Identifying and reporting on climate efforts or sustainability achievements will reduce the possibility of duplicating efforts, leverage limited human and financial resources, and will promote past successes and highlight the community's commitment to climate protection.

## Step 4: Identify Goals and GHG Emissions Reduction Targets

### Identify Goals



Goals are an integral part of a CAP as they frame the vision for what the community aims to achieve. Goals are typically broader, more generalized statements than the more specific targets and metrics established to support them. These broader goals are often used as overarching guidance in the CAP around which the initiatives for reducing GHG emissions or other sustainability efforts can be organized.

The advisory committee and/or stakeholders will typically brainstorm and develop the goals for the CAP. Often these goals align with those of neighboring communities and/or regional efforts, such as those established under the Cleaner, Greener Communities program. Aligning goals and initiatives



with those that are being developed through this regional sustainability planning process can help local governments contribute to the larger sustainability goals of the region.

It is important to note that some CAPs use the term “goal” and “target” interchangeably. In fact, some CAP developers will choose to make specific targets their goals. An example of a broader goal for energy might be “to increase the amount of energy coming from renewable sources.” An example of a goal that also incorporates a target might be to “increase the amount of energy coming from renewable sources to 20 percent by 2030.” Either approach is valid as the goals will frame the more specific initiatives needed to achieve the goals. If keeping the overarching goals of the CAP broader, it is important to establish the more specific targets to support those goals as well.

## Set Emissions Reduction

### Targets

Emissions reduction targets establish a quantifiable reduction in GHG emissions by a predefined date. In addition to setting a GHG emissions reduction target, many local governments also set goals that are indirectly related to GHG emissions but reflect the larger values of the community. For example, a CAP may include a goal of achieving a certain recycling rate, or increasing participation of a particular population in programs that have a climate benefit such as weatherization assistance programs.

When developing CAP goals and GHG emissions reduction targets, it is important to consider existing goals set by the State and/or regional climate and sustainability plans. In 2010, New York State completed regional sustainability plans under the NYS [Climate Smart Communities](#) and [Cleaner Greener Communities](#)

programs for all regions. Regional plans, such as those developed under NYS

[Climate Smart Communities](#) and [Cleaner Greener Communities](#) programs, rely on local government aligning implementation efforts with existing goals and initiatives to achieve the larger sustainability

**Figure 8: Climate Change Goals in New Rochelle, New York**



**The New Rochelle  
Sustainability Plan  
2010 - 2030**



### Climate Change Goals in New Rochelle, New York

In 2011, the City of New Rochelle, NY released [GreenNR: The New Rochelle Sustainability Plan 2010-2030 Vision and Action for a Healthier Community](#). One of the Plan’s overarching goals is to reduce GHG emissions at least 20 percent below baseline year levels by 2030. In the Climate and Energy chapter of the Plan, New Rochelle set additional goals that align with New York State initiatives and will achieve the overall goal of reducing GHG emissions 20 percent by 2030. By 2030, the GreenNR Sustainability Plan aims to:

- Reduce per capita energy consumption by at least 20%, from 125 MMBtus to 100 MMBtus.
- Reduce annual per capita CO<sub>2</sub>e emissions by at least 20%, from 9.0 metric tons to 7.2 metric tons.
- Reduce municipal energy use, GHG emissions, and costs for lighting by at least 40% and for buildings by at least 15%.
- Increase the average gas mileage of the municipal fleet by 50% from 10 mpg to 15 mpg.
- Align with New York State objectives to obtain at least 30% of energy from renewable sources.

*Source: GreenNR: The New Rochelle Sustainability Plan 2010-2030*



goals of the region or State. The City of New Rochelle aligned GHG emissions reduction initiatives with New York State and set their own goal to reduce GHG emissions by 20 percent by 2030 (see [Figure 8](#)).

Local governments can also consider aligning GHG emissions reduction targets with the state. The 2014 [New York State Energy Plan](#) set a GHG emissions reduction target of 50 percent below 2010 levels before the year 2030. Local governments can use the same target year to facilitate collective reporting in the future.

“ NYS will reduce GHG emissions by 50 percent below 2010 levels by 2030. ”

Source: [New York State Energy Plan](#)

## Step 5: Identify Existing and Potential Initiatives



Once the goals of the CAP have been established, the next step is to identify the initiatives that will guide how the community will reach those goals. As mentioned in Step 4, it is best to review existing regional plans and determine if similar implementation measures can be adopted at the local level. It will also be necessary to locate communities with similar demographics, resources and infrastructure that have developed CAPs or sustainability plans and determine if similar actions apply to your community.

After initial research has been completed to identify common implementation measures, the CAP advisory committee will need to enlist the help of internal and external task force groups, public workshops, and other methods for stakeholder engagement as described in Step 2. Potential implementation measures should be shared in public meetings and workshops to solicit feedback on the types of initiatives that might be applicable to the local community. Sharing implementation measures recommended in regional sustainability plans or similar communities with a CAP will hopefully inspire the public to adopt a similar approach or create custom implementation strategies for the local community. It is recommended that this process be repeated over a series of stakeholder meetings to capture a diverse set of community interests.

Many communities rely on “SMART” criteria for developing initiatives in the climate action planning process. SMART refers to “Specific, Measurable, Attainable, Relevant, and Timely.” It may be useful to write these terms up on a board or large poster during focus group discussions to ensure that the initiatives being suggested meet the criteria defined in [Table 2](#).

**Table 2: SMART Goal Definitions**

<b>S</b>	“ <b>Specific</b> ” refers to the “who, what, and where” of an initiative.
<b>M</b>	“ <b>Measurable</b> ” ensures that it can be tracked and improvement seen over time.
<b>A</b>	“ <b>Attainable</b> ” means that it will be financially, politically, and logistically feasible to implement.
<b>R</b>	“ <b>Relevant</b> ” ensures that the initiative is related to a specific goal or vision of the plan.
<b>T</b>	“ <b>Timely</b> ” means that a specific action is to be completed by a certain point in time.



## Step 6: Quantify Potential Impact of Initiatives



After public input has been collected, the CAP advisory committee will need to develop a method to assess the potential benefits and possible drawbacks of each initiative. Developing evaluation criterion will establish standards for assessing each initiative to see if an initiative will be effective in meeting the goals of the CAP. There are many ways to develop criteria for prioritizing initiatives, but it is important that the criteria be clearly defined and scored in a consistent manner. Note that not all initiatives can be directly quantified and may depend on availability of other types of baseline data. Below is a list of suggested evaluation criterion:

- **Implementation and Funding Feasibility** – Are there political, logistical, and/or financial obstacles to implementation?
- **Leverage Resources** - Can funding be leveraged from different departments or sources to implement this initiative? Is there sufficient staffing or volunteers available to administer programs?
- **Potential Health Benefits** – Does this initiative promote public health and welfare? Does it take into account the impact on air, soil or water quality?
- **Co-Benefits** – In addition to reducing GHG emissions, does the proposed initiative provide benefits in other areas of interest for the community, such as supporting regional or state plans and/or economic development?
- **Cost** – Which strategies will be most cost effective to implement, both in the short term and over time? What is the payback period of the initial investment?
- **Duration of Benefits** – Will the benefits of the initiatives continue over a long period of time, or will the benefits be concentrated in a one-time event?
- **GHG Reduction Potential** – Which strategies are likely to have the greatest impact on GHG emissions?
- **Potential for Job Creation** – Will the outcome of this action lead to the creation of additional jobs? Will the jobs created potentially support a green innovation economy?
- **Timeframe** – How long will it take for this initiative to be implemented – short, medium or long term?

## NYS Cleaner Greener Communities – Capital Region Scoring Matrix



An evaluation process and criteria were developed to assess the initiatives in the [Capital Region Sustainability Plan](#). Initiatives were evaluated based on how they met each of the criteria as defined in the sustainability plan. Initiatives could score 1, 3, or 5 points based on achieving a “low, medium, or high” rating. The criteria and scoring methodology provided in [Table 3](#) can be modified and leveraged for local climate action planning.





**Table 3: Cleaner Greener Communities: Capital Region Scoring Matrix**

**Evaluation Process and Criteria**  
Capital Region Cleaner, Greener Communities Regional Sustainability Plan

Scoring Criteria Name	Criteria Description	Rating Description		
		High (5 Points)	Medium (3 Points)	Low (1 Point)
Benefits multiple communities	Initiative benefits, either directly or indirectly, multiple communities within the Capital Region.	Benefits 10 or more communities in the region and does not adversely impact any communities	Benefits 3-10 communities in the region and does not adversely impact any communities	Benefits fewer than 3 communities OR benefits more but has an adverse impact on one or more communities
Implementation Feasibility	Initiative is both financially and logistically feasible.	Initiative has examples of successful implementation that can be applied to implementing within the Capital Region and/or there is a clearly detailed implementation plan in place	Some examples exist for general implementation framework, but with some areas of uncertainty for implementing within the Capital Region	Vague or non-existent understanding of how strategy can be implemented in the Capital Region
Co-benefits	Initiative benefits other Regional Sustainability Plan focus areas by supporting achievement of the goals outlined in that focus area.	Benefits more than 2 other focus areas	Benefits 1 or 2 other focus areas	Does not benefit other focus areas
Leverage Resources	Initiative demonstrates the ability to utilize additional funds and resources for its completion.	Specific non-NYSERDA funding sources are available to cover costs of implementation and any funding necessary to sustain the initiative (if applicable)	Non- NYSERDA funds have been identified to temporarily or partially fund the initiative	Unlikely to leverage additional non-NYSERDA funding sources
GHG Emissions Reduction Potential	Initiative is evaluated based on its GHG emissions reduction potential.	Strategy will result in a direct, quantifiable reduction in GHG emissions	Some GHG emissions reduction may occur but it cannot be quantified	GHG reduction is very indirect, unlikely to occur, or unknown
Timeframe	The timeframe for implementation of the initiative is short, medium, or long-term.	Short-term (less than one year)	Medium term (1-5 years)	Long-term (more than 5 years)
Replicability	Initiative can be immediately implemented throughout region or can serve as a model for other communities to take similar action.	Project could easily be replicated across the region or state	Project is only replicable in certain portions of state or region	Project is unique or would not be replicable in any other areas
Duration of Benefits	The length of time over which the benefits of implementation continue to be realized	The direct benefit(s) of this initiative will persist beyond the next three years	The initiative will have direct benefit(s) that are likely to last throughout the three years of Phase II of the Cleaner Greener Communities Program	The direct benefit(s) of this initiative can only be sustained with continued investment or may have counter-benefits over the long term

Source: [Cleaner, Greener Communities: Capital Region Sustainability Plan](#)



## Tools for Quantifying Initiatives

Climate action planning specifically addresses the reduction of greenhouse gas (GHG) emissions making it essential to include evaluation criteria for the total estimated GHG emissions reductions of proposed initiatives. There are many tools that can help local governments identify initiatives, estimate the implementation costs and the GHG emissions reduction potentials of proposed initiatives. The tool selected for quantifying potential impacts will depend on the type of initiative and the criteria being applied. Consider the following tools throughout the prioritization process:



[ICLEI – Local Governments for Sustainability](#) developed the Climate and Air Pollution Planning Assistant (CAPPED) as a free decision support tool to help local governments explore and identify potential opportunities to reduce GHG emissions. It allows users to enter their own specific emissions information (from their greenhouse gas emissions inventory) and view the hypothetical outcomes for various emissions reduction strategies. This tool requires Microsoft Excel. A *CAPPED User Guide* is provided, as well as free [Online CAPPED Trainings](#).



The [American Council for an Energy Efficient Economy \(ACEEE\)](#) developed the [Local Energy Efficiency Policy Calculator \(LEEP – C\)](#) to help communities identify and compare the implementation costs, energy savings, and cost savings of different energy efficiency initiatives in public buildings and residential buildings. This tool requires Microsoft Excel. Users must log in for free access to download the [LEEP – Calculator](#) and the [LEEP - C User Guide](#).



State and local governments are taking steps to protect the climate and lower energy costs by [adopting policies](#) that leverage the [U.S. Environmental Protection Agency \(EPA\)](#) ENERGY STAR tools to reduce energy use in commercial buildings. [ENERGY STAR Target Finder](#) is a no-cost online tool that enables building owners to set energy targets and receive an ENERGY STAR energy performance score for projects during the design process. Additional ENERGY STAR tools are provided in [Appendix D](#).

## Step 7: Prioritize Initiatives



Applying the evaluation criteria and a scoring methodology developed in [Step 6](#) will help local governments to prioritize potential initiatives, but it is important to keep in mind that evaluating initiatives through this process is not a perfect science. While it does create a useful structure for reviewing the benefits and challenges associated with each, there are a range of initiative types, including policies, plans, direct actions, and others, which makes it challenging to score all initiatives completely objectively and consistently. For this reason, local governments should keep in mind that an initiative should not be ruled out as a priority if it did not score well through this process. For example, an initiatives related to a feasibility study might receive a “low” score because the completion of an analysis itself does not produce direct benefits (e.g., GHG reduction potential, cost savings) compared to an initiative that involves equipment replacement, buildings, or



infrastructure. However, initiatives that involve feasibility studies often create the foundation needed for other actions which do directly address the evaluation criteria.

As mentioned in [Step 2](#), stakeholder input is essential to climate action planning and should be solicited throughout the process. When prioritizing potential initiatives it is important to go beyond systematically evaluating each measure and invite public feedback to provide context or insight for initiatives that may have received lower scores. In many cases goals of the community gathered from public workshops and meetings may take precedence over the scoring matrix methodology outlined in [Table 3](#).

An effective approach to prioritizing potential initiatives through public input is to use interactive polling techniques at public workshops. Interactive polling is a visually stimulating and engaging way to gather information anonymously from participants about concerns and priorities before transitioning to face-to-face discussions. PowerPoint presentation tools, such as Turning Point®, can collect polling results in real-time and display data on a projected computer screen to be shared and discussed at public workshops. Interactive voting at public meetings and workshops can be accomplished without technologies, like Turning Point®. Participants can vote on or prioritize initiatives and goals by placing stickers on posters that display various options and strategies. Local governments should choose the approach that best aligns with allotted time and resources. Refer to [Step 2](#) for more information on engaging the public and stakeholders.

## Step 8: Implement the Plan



A climate action strategy cannot be successful if it cannot be implemented. Once a local government has evaluated and prioritized potential initiatives, local governments will need to develop a plan for implementation. At this stage it may be helpful to meet with stakeholder group(s) to discuss these details and brainstorm ideas for potential partners, funding sources, and any barriers that will need to be overcome in implementing the initiatives. Using much of the information used for prioritizing initiatives, the next step will be to develop implementation plans to answer the following questions for each initiative:

- Who will take the lead in implementing the initiative?
- What are the costs associated with implementation?
- What is the source of funding to cover those costs?
- How long will it take to implement the initiative (short term versus long term)?

In order to move from prioritization of climate action plan (CAP) initiatives to implementation, it is recommended that local governments develop an implementation table similar to the example provided for the Town of Mamaroneck in [Table 4](#). The examples provided demonstrate how it could be used for a specific initiative. Local governments will want to review the categories in the column headings, add or remove any, and apply more specific definitions for each topic. For instance, “cost to implement” is only listed as “low, medium, or high.” Local governments will want to define what cost ranges are considered low, medium, or high. The “Time to Implement” category will also require



definitions for what the local government considers to be “short term” vs. “long term.” The implementation table will help local governments to craft implementation plans for each initiative and guide them from climate planning to climate action.

**Table 4: Town of Mamaroneck: Example of Implementation Plan**

Name of Initiative	Description of Initiative	Cross-Cutting Efforts (i.e., similar initiatives)	Potential for GHG Reduction (Low, Medium, High)	Time to Implement (Short-, Mid-, Long-Term)	Task Leader
Adopt a Green Infrastructure Plan	Adopt a green infrastructure plan or incorporate green infrastructure elements into an existing plan such as a comprehensive plan. Green infrastructure uses vegetation and soil rather than grey infrastructure to absorb stormwater.	Adopt a Native Planting Policy, Green Roof Feasibility Study	No direct GHG reductions result from the implementation of this initiative.	Mid	Conservation Department
Upgrade Traffic Signals to LED	Replace existing traffic signals with LEDs.	Upgrade Streetlights and Parking Lights to LED.	High	Short	Town Administrator, NYPA

Source: [Town of Mamaroneck CSC Implementation Strategy](#)

## Step 9: Establish Metrics



It is important to establish metrics, or indicators, in order to track and report on successes of various initiatives and on the progress toward meeting specific targets and goals. In some cases, the targets established in the CAP lend themselves as metrics. For example, if the CAP includes a target such as:

**Procure 20 percent of energy from renewable sources by 2020.**

The metric for tracking this is *the percentage of energy from renewable sources*. However, an additional metric related to that target could be number of renewable installations or megawatts of installed renewable capacity. Other sample metrics may include:

- Tons of solid waste
- Recycling rate
- Vehicle miles traveled (VMT)
- # of alternative fuel vehicles registered
- # of electric vehicle charging stations
- MMBtu (million British thermal units) energy saved
- # of buildings retrofitted
- Miles of bike lanes installed
- # of LED street lights replaced

Metrics should be derived from a local government’s baseline data so that progress can be measured in the future. For example, to measure reductions in vehicle miles traveled (VMT), local governments will need to know the total VMT for the baseline year determined in [Step 3](#) of this guide. Local



governments should also consider accounting for growth as metrics are tracked over time by incorporating normalized measures. For example, measures such as population can be used to calculate energy use per capita, or square footage can be converted to MMBtu (million British thermal units) per square foot. When assigning metrics to initiatives, consider the availability of data in the future to ensure that the metrics assigned can continue to be measured on a regular basis, such as quarterly or annually. Be sure to account for the staff time and resources required to collect the data and consider establishing a relationship with another entity that can assist in tracking data, such as your local utility or regional planning agency. Developing metrics for each initiative and updating data on a regular basis will enable local governments to report on progress and to take action under Climate Smart Communities *Pledge Element 9: Inform and Inspire the Public*.

## Step 10: Write the Climate Action Plan



A climate action plans (CAP) should be formally documented in a written report to record the goals and initiatives that the local government aims to address and to further explain the methodology and stakeholder engagement aspects of developing the plan. If you have followed all of the preceding steps and documented the process, much of the plan is already written. The final step will be to summarize information and organize the different components into a single document.

Local governments should print hard copies or distribute electronic copies of the official CAP and distribute it to all departments for review. An official version should also be made available on the municipal website for download to take action under Climate Smart Communities *Pledge Element 9: Inform and Inspire the Public*. The following is a sample outline for a CAP. The template can be modified to address a local government's focus areas and initiatives for government operations, community initiatives, or both.

---

### 1. Executive Summary

- a. Significance of climate change (locally and/or globally)
- b. CAP benefits to the local government and community
- c. Summary of CAP goals
- d. Summary of focus areas and major CAP initiatives

### 2. Introduction

- a. Overview of the significance of climate change (locally and/or globally)
  - i. Brief description about why the climate is changing
  - ii. Explanation of local climate change impacts on the local government or community
- b. CAP benefits to local government operations and/or the community

### 3. CAP Goals and GHG Emissions Reduction Targets

- a. Methodology for developing the CAP



- b. CAP structure and content
- c. Goals, targets, and outcomes of public workshops and meetings
- 4. Current Climate Protection Initiatives**
  - a. Summarize existing efforts related to climate change
    - i. Identify active committees and/or members local government staff, commissions and boards, community groups, and other local stakeholders
    - ii. Acknowledge existing studies, plans or actions that have already been taken to reduce energy consumption, increase alternative transportation and other measures to reduce GHG emissions
  - b. Summarize local government's participation in the Climate Smart Communities program and identify the pledge elements completed to date.
- 5. Baseline Assessment for Local Government and/or Community**
  - a. Existing climate protection initiatives, metrics, plans or policies
  - b. Methodology and data explanation
  - c. GHG Emissions Inventory Summary
    - i. Local Government Operations Baseline
    - ii. Community Baseline
  - d. GHG Emissions Inventory Reduction Targets
- 6. Climate Action Plan Initiatives**
  - a. Sector # 1 (such as Energy, Waste, Water, Transportation, etc.)**
    - i. Goal(s)**
      - 1. Initiative # 1
      - 2. Initiative # 2
      - 3. Initiative # 3
  - b. Sector # 2**
    - i. Goal(s)**
      - 1. Initiative # 4
      - 2. Initiative # 5
      - 3. Initiative # 6
  - c. Sector #3 (same as a and b)**
- 7. Implementation**
  - a. Identify metrics for measuring progress
  - b. Estimate the timeframe for when each initiative will be implemented
  - c. Estimate the cost
  - d. Identify a funding source
  - e. Identify the entity that will be responsible for implementation
- 8. Next Steps**
  - a.** Explain the process for reporting progress in implementing initiatives
    - i. Explain the frequency that progress reports will be published
  - b.** Explain how progress towards achieving GHG reduction targets and other goals will be measured
  - c.** Explain the process for updating the climate action plan



## Next Steps



### Pledge Element 9: Inform and Inspire the Public

Once a climate action plan (CAP) has been completed, a local government should continue to engage the public through educational workshops, implementation planning meetings, and other strategies listed in [Step 2](#). The CAP is a living document that should be readily available and accessible to all staff members of a local government and all community stakeholders. A regular reporting process helps to highlight progress and provides the opportunity to inform and engage the public and key stakeholders, while also identifying issues and opportunities to adapt existing approaches. The CAP should be a central point of reference for making decisions related to the focus areas specified in local CAPs. Local governments are encouraged to publish the CAP on the local government website and provide printed copies and/or distribute summary sheets to departments and at relevant public meetings or workshops. Local governments can maintain engagement of key stakeholders through a number of avenues:

- Regular community task force meetings
- Regular communications updating internal and external stakeholders as well as the public on plan implementation progress (e.g., through newsletters, posts on social media)
- Regular appearances at community events educating stakeholders about the local government's energy and climate efforts as well as how they can get involved
- Public recognition of advisory board or key stakeholder involvement
- Continued progress toward implementing climate protection strategies
- Ongoing promotion of climate protection efforts, and making the connection between climate action and other related efforts



### Pledge Element 10: Commit to an Evolving Process

As initiatives are implemented from the CAP and new opportunities arise, local governments should plan to update GHG emissions inventories so that the resulting emission reductions can be compared to the baseline year. This will enable local governments to determine if initiatives are helping to reach GHG emission reduction targets and other metric-related goals from the plan. If goals and targets are being achieved, local governments should consider selecting a new GHG inventory baseline year, establish new GHG emissions reduction targets, and then update the CAP to include strategies that will help the local government achieve newly established GHG emissions reduction targets.



The process for updating a CAP is similar to the process for developing an initial climate action plan. Alternatively, an updated appendix to the original plan with revised or new strategies can be developed. Some local governments have published periodic progress reports to update the community on which initiatives have been implemented and how those measures have helped to reach targets or achieve goals. The metrics developed in [Step 9](#) will help to measure progress and should be referenced in CAP progress reports. The CAP progress reports do not need to be as extensive as the original document and can be formatted in a variety of ways, such as a report card or an interactive website. For example, New York City's Mayor's Office of Long-Term Planning and Sustainability published an update to the city's sustainability plan to highlight existing efforts and progress made to date, [PlaNYC - A Greener Greater New York Update 2011](#).



## Appendix A: Climate Action and Sustainability Plans

### Climate Action Plans

- City of Albany, [Community and Local Government Operations Climate Action Plan 2012](#)
- City of Kingston, [Community-Wide & Local Government Operations Climate Action Plan 2010](#)
- City of Watervliet, [Government Operations Climate Action Plan 2008](#)
- NWEAC [2012 Climate Action Plans: Community & Local Government Operations](#)
- Town of Bedford, [Town of Bedford Climate Action Plan](#)
- Town of Greenburgh, [Climate Action Plan for the Town of Greenburgh Municipal Operations](#)
- Town and Villages of Red Hook and Tivoli, [Energy & Climate Action Plan 2012](#)
- Village and Town of Ossining, [Ossining Community Climate Action Plan](#)
- Village of Larchmont, [Local Government Operations Climate Action Plan](#)

### Sustainability Plans

- All Regions: [Cleaner Greener Communities Regional Sustainability Plans](#)
- Capital Region Sustainability Plan, [Online Version of Capital Region Sustainability Plan](#)
- City of New Rochelle, [GreenNR Sustainability Plan 2010 -2030](#)
- Mid-Hudson Region Sustainability Plan, [Mid-Hudson Regional Sustainability Plan](#)
- Village of Hastings-on-Hudson, [Sustainability Action Plan 2010-2011](#)
- Westchester County, [Westchester Action Plan for Climate Change and Sustainable Development 2008](#)





## Appendix B: Climate Action Planning Resources

- Climate Smart Communities, How To Develop a Local Climate Action Plan:  
<http://www.dec.ny.gov/energy/67493.html>
- ICLEI-Local Governments for Sustainability USA's guidance on crafting a climate action plan:  
[http://www.icleiusa.org/climate\\_and\\_energy/climate\\_mitigation\\_guidance/climate-mitigation-milestone-three](http://www.icleiusa.org/climate_and_energy/climate_mitigation_guidance/climate-mitigation-milestone-three)
- ICLEI -Creating a Climate Action Plan Task Force: <http://www.icleiusa.org/action-center/planning/climate-action-planning/creating-a-climate-action-plan-task-force>
- ICLEI - Climate and Air Pollution Planning Assistant:  
<http://www.icleiusa.org/tools/cappa/climate-and-air-pollution-planning-assistant-cappa>
- NYSDEC's How to Set Up a Climate Smart Community Coordinator or Task Force:  
<http://www.dec.ny.gov/energy/65489.html>
- New York State Energy Plan 2014: <http://energyplan.ny.gov/>



## Appendix C: Climate Adaptation Planning Resources

- [Adaptation Database and Planning Tool \(ADAPT\)](#) – This online tool, available to members of ICLEI – Local Governments for Sustainability USA, guides local governments through the process of conducting a climate change vulnerability assessment, setting climate resiliency goals, and incorporating climate adaptation initiatives into existing planning processes.
- [Climate Change Knowledge Exchange \(CAKEX\)](#) – This online resource library contains many examples of adaptation initiatives, case studies, vulnerability assessments, and adaptation plans.
- [EPA’s Climate Ready Estuaries Coastal Toolkit](#) – The U.S. EPA’s Climate Ready Estuaries program’s Coastal Toolkit contains links to numerous resources and toolkits related to climate vulnerability assessments and adaptation planning.
- [NOAA’s Coastal Climate Adaptation website](#) – The U.S. National Oceanic and Atmospheric Administration (NOAA)’s Coastal Climate Adaptation webpage is a resource library organized by state. Resources can also be searched by the following categories: adaptation action plans, case studies and strategies, climate change communication, climate change science and impacts, guidance and guidebooks, outreach materials, policies and legislation, risk and vulnerability assessment, stakeholder engagement, and training and workshop materials.
- [Georgetown Climate Center Adaptation Clearinghouse](#) – The Adaptation Clearing House contains a variety of resources focused on state and federal policies and legal issues related to climate change adaptation.
- [George Mason University Center for Climate Change Communication](#) – The Climate Change Communication website contains resources and reports focused on communicating the impacts of climate change to the public. Information on communicating climate change can be helpful in the public engagement and implementation components of a climate action planning process.



## Appendix D: ENERGY STAR® Resources



State and local governments are taking steps to protect the climate and lower energy costs by [adopting policies](#) that leverage the [U.S. Environmental Protection Agency \(EPA\)](#) ENERGY STAR tools to reduce energy use in commercial buildings.

- [ENERGY STAR Target Finder](#) is a no-cost online tool that enables building owners to set energy targets and receive an ENERGY STAR energy performance score for projects during the design process.
- [Cash Flow Opportunity Calculator](#) helps inform strategic decisions about financing energy efficiency projects. Using the tool, you will be able to estimate how much new equipment you can finance using anticipated savings, as well whether you should finance now or wait for a lower interest rate.
- [Financial Value Calculator](#) helps you quantify the value of improvements in energy efficiency. The calculator uses the prevailing price/earnings ratio to estimate the market value of increased earnings that can result from increased energy efficiency.
- [Building Upgrade Value Calculator](#) lets you analyze the financial value of efficiency-related capital investments. Enter information—such as square footage, annual utility bill, the projected cost and savings for each investment, and financing terms—to determine a particular investment's energy and financial benefits. The tool will generate a summary report, or automatically generate a customized letter to present findings and secure funding.



**Disclaimer:** This report was prepared by VHB Engineering, Surveying and Landscape Architecture, P.C. in the course of performing work contracted for the New York State Energy Research and Development Authority (NYSERDA). The opinions expressed in this report do not necessarily reflect those of NYSEDA 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, NYSEDA and the State of New York 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. The NYSEDA, 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.