New York State
Climate Smart Communities

Climate Smart Communities Certification Manual Version 2.0

Climate Smart Communities is a program of the New York State departments of Environmental Conservation, Health, State and Transportation; State Public Service Commission; and State Energy Research and Development Authority.

September 2014

Acknowledgments

The launch of the New York State Climate Smart Communities Certification program adds a new dimension to New York State's efforts to provide support, technical assistance and leadership to the state's local governments as they undertake efforts to reduce their greenhouse gas emissions and adapt to the effects of climate change. This Certification Manual describes the actions Climate Smart Communities can take, the standards they must meet and procedures for submitting documentation for credit toward certification and the bronze, silver and gold award levels.

The Climate Smart Communities program was originally launched in February 2009 by the state departments of Environmental Conservation and State, Energy Research and Development Authority, and Public Service Commission. The state departments of Health and Transportation subsequently joined as participating agencies. Since that original launch, more than 126 counties, cities, towns and villages have committed to local climate action by taking the Climate Smart Community pledge. Through the launch of the certification program and release of this Certification Manual, the Climate Smart Communities agencies hope to provide a more structured framework of local action and a means to recognize the efforts of those communities that are leading the way in confronting the challenges of climate change.

This document was prepared for the New York State Department of Environmental Conservation's Hudson River Estuary Program, with support from the New York State Environmental Protection Fund, in cooperation with the New England Interstate Water Pollution Control Commission.

This Certification Manual was developed by staff at Vanasse Hangen Brustlin, Inc., under the direction of Sustainability Project Manager *Angela Vincent*:

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Climate Smart Communities Certification Program

Certification Manual

INTRODUCTION AND PROGRAM REQUIREMENTS

New York State established the Climate Smart Communities (CSC) Program in 2009 to provide local governments with guidance on how to reduce GHG emissions, save taxpayer dollars, and advance community goals for health and safety, economic vitality, energy independence, and quality of life. The program is free and open to all local governments in New York State. The Climate Smart Communities Program is jointly sponsored by six New York State agencies: the Department of Environmental Conservation (DEC), the State Energy Research and Development Authority (NYSERDA), the Department of Transportation (DOT), the Department of Health (DOH), the Department of State (DOS), and the Public Service Commission (PSC).

The New York State Climate Smart Communities Certification program represents the next phase in development of the CSC Program. Development of the CSC Certification Program began in 2013 with funding from the New York State Environmental Protection Fund through the DEC Hudson River Estuary Program and in cooperation with the New England Interstate Water Pollution Control Commission. The intent of the CSC Certification Program is to further engage New York State local governments in the CSC Program, to provide a more robust framework to guide local governments in their climate action efforts, and to recognize their achievements as they make progress.

Any local government whose legislative body adopts the Climate Smart Community Pledge is designated a Climate Smart Community. The certification program described in this manual provides information on a number of climate mitigation and adaptation actions. Communities can be awarded a specified number of points toward certification and the higher levels of bronze, silver and gold for each action they complete. In addition to accumulating a minimum number of points for to achieve each level of recognition, each community must complete a number of “priority” actions. This manual describes each action, the number of points that may be earned, minimum requirements and the documentation that must be submitted to earn points.

PROGRAM GOALS, OBJECTIVES, AND PRINCIPLES

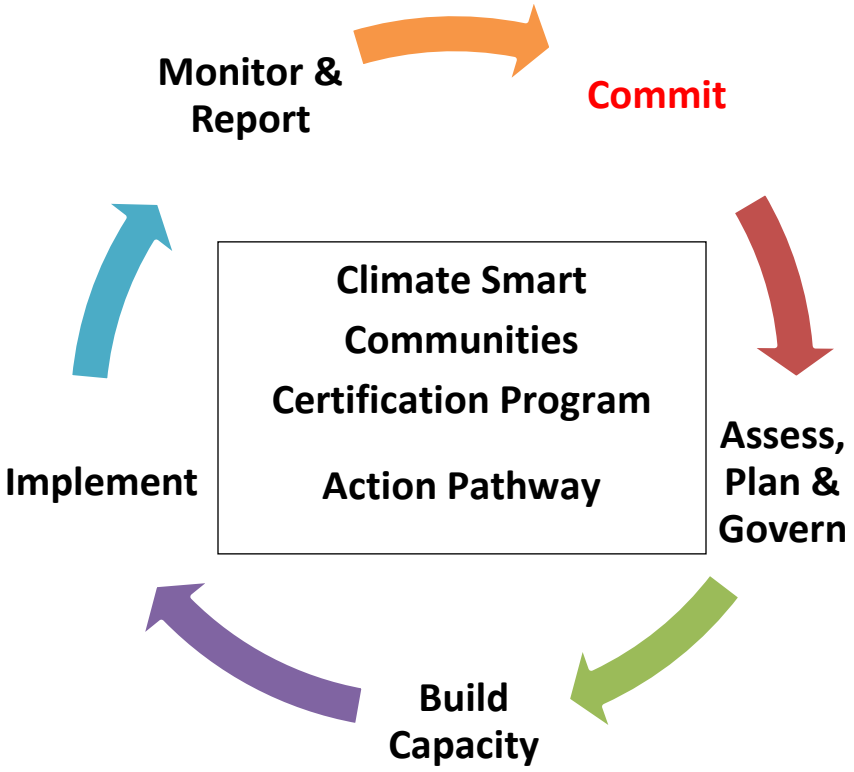
New York State developed the CSC Certification Program with the primary goal of providing a more structured framework and guidance for local governments to advance their local climate action through the existing CSC Pledge. This certification is based entirely on the existing CSC pledge elements. Participation in CSC and the CSC Certification Program is voluntary. The CSC Certification Program is designed to encourage ongoing implementation of actions related to climate action mitigation of

climate change through reduction of greenhouse gas emissions and adaptation to effects of climate change, and to recognize achievements of local governments in every phase of the program.

The following design guidelines were used to develop the rating system:

- **Broadly Applicable**: The program is designed to be applicable and useful to all local governments in New York State.
- **User Friendly**: The program has an easy to navigate menu-based system, which allows local governments to select actions that are most appropriate to their local needs.
- **Acknowledges Early Adopters**: Jurisdictions can earn points for actions implemented before the release of the rating system.
- **Promotes Ongoing Action**: The framework and overall program are designed to drive ongoing action toward achieving goals.
- **Rewards Leaders**: Bonus points can be awarded for local governments that demonstrate performance improvements or innovative strategies.

The actions within the CSC Certification Program are organized based on an action pathway (see figure below). The five action pathway phases of the CSC process are designed to guide continual progress toward achieving climate action goals. The first phase of the process (Commit) is a local government's entryway into CSC Program. The last phase (Monitor & Report) is the public communication and recognition of a local government's efforts through achievement of a level of CSC certification. The three steps between are the foundation for the certification program. These are described below:



- **Commit:** Make a commitment to reduce GHG emissions and adapt to climate change. Adopting the CSC Pledge demonstrates this commitment.
- **Assess, Plan and Govern**: Assess baseline conditions, establish goals, and develop plans and policies to achieve those goals.
- **Build Capacity**: Identify or hire a party to be responsible for the ongoing implementation and reporting of actions. Collaborate with key stakeholders to achieve goals. Educate staff and stakeholders on the value of these efforts.
- **Implement**: Apply resources and leverage tools to implement initiatives to achieve goals.
- **Monitor and Report**: Track, through various metrics, the progress of an action and publicly report the results. Celebrate important successes, and notify and engage the public.

CERTIFICATION FRAMEWORK: 10 CLIMATE SMART COMMUNITIES PLEDGE ELEMENTS

The CSC Certification framework has been organized around the ten pledge elements in the Climate Smart Communities Pledge. Local governments that have signed the pledge have made a commitment to addressing these ten areas, and many are already implementing actions in the certification program. The descriptions of the ten pledge elements have been modified from the original version of the pledge to be consistent with the scope and goals of the certification program.

1. **Pledge to be a Climate Smart Community.** Adopt the pledge to reduce greenhouse gas (GHG) emissions and adapt to a changing climate. Designate a point person and a Climate Smart

Communities task force. Join a regional or national climate campaign focused on reducing GHG emissions or enhancing sustainability[1].

2. **Set goals, inventory emissions, plan for climate action.** Gather data about local GHG emission sources. Develop baseline emissions inventories for government operations and the community. Establish quantifiable GHG emissions reduction targets. Propose an emission reduction schedule and financing strategy. Develop a local action plan for reducing emissions.

3. **Decrease community energy use.** Adopt specific energy-reduction goals. Take action to reduce energy demand in existing public facilities, infrastructure, and vehicle fleet, and to maximize energy efficiency. Implement policies and programs to reduce community energy demand through energy conservation and efficiency improvements. Reduce waste and increase recycling in government operations. Encourage and support action by local government employees to meet energy use reduction goals.

4. **Increase community use of renewable energy.** Set a goal to maximize the use of renewable energy in municipal operations and the community. Implement renewable energy projects such as solar, wind, geothermal, or small hydro. Implement policies and programs to encourage community use of renewable energy sources.

5. **Realize benefits of recycling and other climate-smart solid waste management practices.** Encourage and support waste reduction, reuse, recycling and composting of materials community wide. Offer recycling and composting programs, household hazardous waste collections, and waste diversion opportunities that focus on reducing and reusing materials.

6. **Reduce greenhouse gas emissions through use of climate-smart land-use tools.** Minimize the GHG impact of new development. Update or adopt community plans, land-use policies, building codes, and multi-modal transportation actions to limit sprawl, reduce vehicle miles traveled, and protect open lands, wetlands, and forests.

7. **Enhance community resilience and prepare for the effects of climate change.** Establish a climate resiliency vision and associated goals, identify vulnerabilities to climate change effects for both government operations and the community, and develop and implement strategies to address those vulnerabilities and increase overall community resilience.

8. **Support development of a green innovation economy.** Lead and support the transition to a green economy by incorporating climate action and sustainability into economic development plans. Create demand and offer incentives and support for local green industries and green jobs training.

9. **Inform and inspire the public.** Lead by example. Host events; organize campaigns, and support websites and social media outlets that publicize local government commitment to reducing energy use; saving tax dollars; reducing, reusing, and recycling materials; and adapting to a changing climate. Encourage citizens to follow suit.

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[1] The definition of sustainability is an active topic of debate. For purposes of the CSC Certification Program, this manual will use the term in the sense of the definition of sustainable development provided by the Brundtland Commission: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
http://www.un-documents.net/wced-ocf.htm

10. **Commit to an evolving process of climate action.** Monitor and report on progress toward achieving goals. Be willing to consider new ideas and adjust existing approaches. Ensure strategies and plans are up to date. Compare successes and cooperate with neighboring communities. Maintain involvement of stakeholders.

The majority of the points in the rating system can be earned through the actions associated with the ten pledge elements. However, the system has been designed to encourage and reward local governments that have implemented innovative actions and can demonstrate achieved GHG emissions reductions and other performance metrics. Thus, CSCs can earn bonus points by demonstrating innovation or achieved performance.

- **Innovation Bonus Points.** Earn additional points for using innovative strategies for the implementation of climate action actions. CSCs achieve this by implementing advanced actions not included in the rating system or using an innovative approach to implementing an action in the rating system. Innovation bonus points will be determined on a case-by-case basis.
- **Performance Bonus Points.** Earn additional points for demonstrating actual reductions in energy use and GHG emissions resulting from the implementation of specific actions. This will require CSCs to provide actual energy use or other relevant data with before and after details to confirm achievement.

ACTION TYPES AND POINTS

The actions in the CSC Certification Program are organized according to the ten CSC pledge elements and further classified by the type of action as indicated in Table 1. A menu of potential actions that a local government can implement to reduce GHG emissions or adapt to a changing climate is associated with each pledge element. This allows local governments to select and earn points for the most applicable actions, without requiring a large number of strict preliminary steps or prerequisites. The menu-based rating system includes a variety of action types that allow local governments to easily match the actions they have taken with those in the certification program. Local governments are not required to proceed through the actions in order; they may select the actions that are most relevant to their particular circumstances.

The rating system includes a variety of actions that can have an effect on reducing GHG emissions, enhancing local resilience, or building a green economy. Based on the following criteria, points were assigned to each action using a consistent methodology:

- **Program Priority**. Priority actions for this program have been identified and are weighted most heavily.
- **Duration.** For how long will the action have an effect, short-term (1-5 years), medium-term (6-10 years), or long-term (over 10 years)?
- **Impact**. What is the possible effect of the action in terms of GHG reductions, climate resiliency, or building a green economy?
- **Certainty**. How certain is it that the action will have an impact? Does the action require some management, enforcement, or program uptake to have an impact?

- **Level of Effort / Cost to Implement**. What is the level of effort or cost to implement the action? What is the incremental cost of the action compared to a more conventional approach? What is the payback period of the action?

Each action was assigned a score in the methodology criteria stated above, and then the weighted average of the points was used to determine the score for the action. A summary of the range of points associated with each action is provided in Table 1 along with the breakdown of the action type and associated action pathway Phase.

Table 1: Action Types and Associated Points

Action Pathway Phase	Action Type	Description	Point Range
Assess, Plan and Govern			
Assess, Plan and Govern	Inventory, Assessment, Survey, or Technical Report	Conducting an analysis to support the implementation of climate action strategies. Includes GHG inventories, assessments, surveys, audits, or reports.	4-8
Assess, Plan and Govern	Plan Development	Development or updates to any community plans such as a land-use plan, climate action plan, sustainability plan, open space plan, strategic energy plan, etc.	4-8
Assess, Plan and Govern	New Policies, Laws, or Zoning	New or updated ordinances, resolutions, laws, codes, zoning, or standards.	3-8
Build Capacity			
Build Capacity	Education and Outreach	Public awareness, education, outreach, campaign or public engagement efforts; forming task forces or advisory committees.	2-5
Build Capacity	Partnerships and Collaboration	Working with neighboring jurisdictions, agencies, multi-jurisdictional efforts, task forces or advisory committees, or other organizations on shared objectives.	2 to 4
Implement			
Implement	Operational Changes	Changes to operations or practices. Forming an internal green team. Appointing staff to work on climate change related issues.	1-5
Implement	Programs, Services, and Incentives	Local government-led initiatives that support climate action efforts in the community. Includes financing programs, incentives, and programs to minimize environmental impacts.	2-8
Implement	Facilities and Infrastructure	Investments or capital improvements to community or government-owned facilities, infrastructure, or operations, such as buildings, vehicle fleets, public transit systems, outdoor lighting, waste management, wastewater treatment plants, etc. Includes green and grey infrastructure.	1-10
Monitor and Report			
Monitor and Report	Reporting	Reports or scorecards that provide updates on the progress of implementation of actions and the results associated with them.	3-4

BONUS POINTS			
Innovation	Innovation	An action or innovative approach that is not listed in the rating system, but provides a climate mitigation, adaptation, or green economy benefit. Points will be awarded based on the direct benefits provided by the action.	1-10
Performance	Performance	Additional points for demonstrating reductions in energy use and GHG emissions. Local governments must provide data on actual energy savings to receive performance bonus points.	5-50

AWARD LEVELS AND CERTIFICATION

PRIORITY AND OPTIONAL ACTIONS

The CSC Certification program is based on two types of actions:

- **Priority actions**: A group of actions that must be completed for each award level. Applicants must complete the required priority actions for each award level along with a minimum number of additional priority actions for each award level.
- **Optional actions**: All actions that are not labeled as priority. Applicants may select any optional actions to complete to earn points toward one of the award levels.

In addition to certification, CSCs can achieve several award levels: bronze, silver and gold. Award levels are based on the total points earned and the completion of selected priority actions. For each of the certification and award levels, the program specifies a minimum number of priority actions that must be completed, as indicated in Table 2, as well as a minimum number of points that must be accumulated by completion of optional actions in addition to the points earned by completion of priority actions:

The award levels and requirements are defined in Table 2.

Table 2: CSC Certification Program Requirements

Award Level	Description	Point Requirement	Minimum Pledge Elements	Required Priority Actions	Minimum Additional[2] Priority Actions	Minimum Performance/ Innovation Points
Registered Climate Smart Community	Local governments are recognized as being registered with the program upon signing the CSC pledge.	N/A	PE1	1.1	N/A	0
Certified Climate Smart Community	The initial level of certification, for local governments that have demonstrated a commitment toward climate action and have	120 points	PE1, PE2, PE3, plus 2 more PEs	1.1, 1.3	4 of 11	0

[2] Additional priority actions include 1.2, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 7.1, and 7.3.

Award Level	Description	Point Requirement	Minimum Pledge Elements	Required Priority Actions	Minimum Additional[2] Priority Actions	Minimum Performance/ Innovation Points
	taken the initial steps in establishing climate smart policies.					
Certified Climate Smart Community, Bronze	The second level of certification, for local governments that have made a commitment and have begun to take action.	250 points	PE1, PE2, PE3, plus 4 more PEs	1.1, 1.3	6 of 11	5 points
Certified Climate Smart Community, Silver	The third level of certification, for local governments that have implemented a wide variety of climate action actions for government operations and the community.	350 points	PE1, PE2, PE3, plus 5 more PEs	1.1, 1.3	11 of 11	10 points
Certified Climate Smart Community, Gold	The highest level of certification, for local governments that have successfully taken action to address all pledge elements and can demonstrate tangible reductions in GHG emissions.	450 points	All	1.1, 1.3	11 of 11	20 points

PARTICIPATING IN THE CERTIFICATION PROGRAM

Once a local government adopts the CSC Pledge and submits a certified copy of the adopting resolution to the Department of Environmental Conservation (DEC) it will automatically become a Registered Climate Smart Community. Each CSC can then implement actions at its own pace. There is no time limit between adoption of the pledge and commencement of the remainder of the certification process.

Beginning the Certification Process

This section provides some general guidance and tips on how to approach the certification process and what to expect, based on the experiences of the communities that participated in the development and pilot of the program. To get started with the certification process, local governments should do the following:

1. **Review certification materials**: Review the CSC Certification Checklist and Certification Manual and estimate how many points the local government could potentially earn and what award level could potentially be achieved. The Certification Manual describes the specific documentation requirements for each action. It is advisable not to begin the certification application process until you believe that your CSC has completed enough actions to achieve at least the "Certified" award level.
2. **Designate a project coordinator**: This could be a local government staff member or a volunteer, and probably a member of the CSC task force. It works best to have one person organizing all of the documentation and driving the process forward, although other staff members and volunteers could be enlisted to support the process.
3. **Get organized**: Establish a system for managing all of the documentation internally and keep track of your progress as you gather all of the required materials.
4. **Gather publicly available information:** Identify all materials that are publicly available for each of the actions in which you are seeking points.
5. **Request materials from local government staff members**: Identify the appropriate staff members to contact for information on various actions and request required materials well in advance of the planned submittal date. Make sure to provide specifics on all of the information required for the action.

The amount of time it will take to gather the relevant materials and apply for certification will depend on the availability of the materials and the award level the local government is seeking. Allow plenty of time to collect all of the required materials. Local governments should consider starting the process of preparing for certification approximately six to twelve months prior to the desired application date.

Applying for Certification

Local governments can follow the guidelines and requirements below for becoming certified:

- Local governments can submit documentation of actions completed toward certification at any point.
- Certification will be granted if a local government has met the minimum requirements for one of the certification levels, which include the stated requirements for minimum points, minimum

pledge elements represented in the actions completed, and priority actions, and performance and innovation points, as appropriate.

- Points will be awarded for actions that were achieved by a local government prior to adoption of the CSC Pledge. The eligibility timeline for each action specifies the maximum amount of time (prior to the date of documentation submittal) by which the action must have been completed to qualify for points.
- Local governments may earn points for some specified actions only once when applying for certification and are not able to earn multiple points if one of these actions is completed several times[3].
- Certification will be in effect for a five-year period, which will commence upon notice by DEC, or its designated agent, of certification. No further action by the community will be necessary to maintain "Certified" status during the five -year period.
- Local governments may apply and earn one of the higher award levels upon initial certification, provided they meet the minimum requirements for that award level, and once certified, may submit action documentation for points toward higher award levels at any time.

Submitting Documentation for Certification

- All documentation should be submitted to DEC's Office of Climate Change by e-mail at climatechange@dec.ny.gov . If hard copies must be submitted, they should be mailed to

New York State Department of Environmental Conservation
Office of Climate Change
625 Broadway
Albany, N.Y. 12233-1030
Attn: CSC Certification

Contact the Office of Climate Change to arrange transfer of large files (greater than 25mb).

Communities with no or slow access to the Internet should contact the Office of Climate Change for alternative submittal instructions.

Review procedures are still under development for a few of the actions described in the certification manual. Documentation of these actions may not be submitted at this time.The Action Checklist available at http://www.dec.ny.gov/energy/96511.html indicates the few actions for which the Office of Climate Change is not yet able to accept documentation.

- Local governments should complete the Document Submittal Form for each action for which they seek to earn points. The Document Submittal Form should include a list of all of the documents or website addresses to be submitted as evidence of completing the action, along with a brief summary of how the documents demonstrate completion of the action.

- For larger documents in which only a portion of the document is relevant for the action, local governments must specify the relevant pages to be reviewed on the Document Submittal Form.

[3]Local governments may submit several projects for consideration for the Innovation bonus, provided each project is unique, unrelated, and substantially different.

- Local governments may submit links to documentation or websites online, instead of submitting PDFs or hard copies of documentation.

Note: Review and approval of documentation submitted through the Climate Smart Communities certification program does not constitute approval for the purposes of any regulatory or other agency program and should not be interpreted as such.

Collaborating with Partners to Complete Actions and "Substantial Involvement"

Local governments can earn points for actions that they implement alone or in partnership with other entities, such as counties, neighboring jurisdictions, or regional organizations. To earn points for an action in which the local government is not the lead actor, the local government must demonstrate *substantial involvement* in the action. Substantial involvement could include, but is not limited to, a commitment of resources or other political support, such as the following:

- Financial investment or resources
- Staff resources
- Provision of property or other in-kind resources
- Local government resources or services to support an event, such as security or recycling pickup
- Participation on a board or committee
- Participation in a planning process
- A resolution of support
- Commitment to support an action in a plan, policy, ordinance, or other adopted document
- Adoption, enforcement, implementation of a countywide policy, plan, or ordinance

For actions in which a local government seeks to earn points for which it is not the lead actor, but is substantially involved, it must submit evidence demonstrating its involvement and explain its involvement on the Document Submittal Form.

If a local government has collaborated with another community on an action for which both seek to earn points, each local government must submit documentation separately as part of its individual application for certification.

Recertification

Local governments can follow the guidelines and requirements below to maintain their CSC certification:

- Recertification is necessary within five years of initial certification and every five years thereafter. The guidance for each action indicates the recertification requirements for that same action. Any local government that does not recertify will remain a Registered CSC participant and can seek to attain certification or a higher award level again at any time.
- Certified CSCs may begin submittal of documentation to support their application for recertification up to 60 calendar days prior to the fifth anniversary date of certification, as described above. All documentation must be submitted by the fifth anniversary date. A 30-calendar day grace period will be allowed.

- CSCs applying for recertification must demonstrate that all priority and non-priority actions are still in effect or have been completed or repeated during the maximum period allowed since initial certification or the most recent recertification, as indicated in the guidance for each action.
- Communities that have submitted all required documentation to support recertification by the end of the grace period will retain their "Certified" status until the CSC agencies, or their designated agents, have completed their review.
- Certified CSCs that either fail to provide required recertification documentation by the end of the grace period, or fail to meet the recertification requirements will no longer be designated "Certified."
- The recertification requirements are specified for each action in the Certification Manual. However, these requirements are subject to change in future versions of the manual.
- Upon applying for recertification, local governments may earn points for the same actions for which they earned points upon initial certification, as described in the section on recertification.

Award Levels

- A Certified CSC may apply for a higher award level (bronze, silver, and gold) upon documentation of completion of the designated priority and optional actions sufficient to achieve the designated point totals.
- CSCs applying for higher award levels must demonstrate:
    a) All priority actions for certification are still in effect or have been completed or repeated during the maximum period allowed since initial certification or the most recent recertification, as specified in the CSC Certification Manual; and
    b) Completion of optional actions, as described in the CSC Certification Manual, is sufficient to earn at least the minimum number of points for the award level.
- Certified CSCs may submit documentation to support their application for an award level on a rolling basis; however, achievement award levels will be announced only once per year at a date to be determined.
- DEC, or its designated agent, will review the submitted documentation and notify the community of the total number of points awarded and the award level achieved, if applicable.
- Communities will be permitted to "skip" award levels as their completed actions warrant.
- Award levels will be in effect for five years from the *original certification anniversary date prior to notice of the award level to the community.*
- *As noted above, Certified CSCs must apply for recertification by the fifth anniversary date of their certification. Communities may apply for action points concurrently with their recertification application and will receive higher award levels as applicable, provided they continue to meet all certification requirements.*

HOW TO USE THIS CERTIFICATION MANUAL

The Certification Manual is intended as a reference for local governments to learn about the various actions, understand the requirements for receiving points for each action, and obtain basic guidance and best practice examples on how to implement each action. The actions are organized by the pledge element with which they are most closely associated; the actions associated with each of the 10 pledge elements are organized into. A "checklist" of all actions included in the manual is also available. Actions can be easily identified in the summary and clicked on for a more detailed overview of each action. The search function at the top of the PDF can also be used to find specific actions by keywords.

Definitions

The key terms used in the certification program and rating system are defined below:

1. **Award level**: A level of recognition a local government can achieve by earning a specified number of points certified, bronze, silver, or gold
2. **Action**: An initiative undertaken by a local government to demonstrate progress toward fulfilling a pledge element. Points are associated with actions depending on the effect of the action in the community and the level of difficulty of implementing that action. The certification program includes the following types of actions:
    - Education and Outreach
    - Partnerships and Collaboration
    - Inventory, Assessment, Survey, or Report
    - New Policies, Laws, or Zoning
    - Operational Changes
    - Plan Development
    - Programs, Services, and Incentives
    - Facilities and Infrastructure
3. **Action Pathway**: The process by which local governments move through the Climate Smart Communities Program. The action pathway is divided into five phases.
    - Commit
    - Assess, Plan and Govern
    - Build Capacity
    - Implement
    - Monitor and Report
4. **Award Level:** Any of the following designations awarded by the Climate Smart Communities Certification Program: Registered, Certified, Bronze, Silver and Gold.
5. **Category**: A designation used to organize and group actions within a pledge element to help local government staff identify actions that are relevant to their jurisdictions.
6. **Certified Climate Smart Community**: A New York State village, city, town or county that has met at least the minimum requirements of the CSC Certification Program.
7. **Eligibility Timeline**: The time prior to the application date in which an action must have been completed to qualify for points. Some actions must be in progress or currently active to qualify for points. The following terms are used to describe the time period for eligibility:

- Currently active. The action must be operational or in-progress, or activity related to this action occurred within one year prior to the application date to be eligible for points.
- Within X years prior to the application date. The action must have been implemented or completed within the designated number of years prior to application for CSC certification to be eligible for points.
- Any time prior to the application date. The action may have been completed any time before application for certification to be eligible for points.

8. **Innovation Bonus Points**: The innovation section is specifically designed to allow for bonus points for actions that are completely new to the state or that are existing actions that are implemented in a unique way. The innovation bonus points encourage the communities that want to advance do so, while not creating undue burdens on communities that are not yet ready to innovate.
9. **Optional actions**: All actions which are not labeled as priority. Applicants may select any optional actions to complete in order to earn points toward one of the award levels.
10. **Performance Bonus Points**: Bonus points can also be achieved by documenting and reporting achievements in performance, e.g., reductions in GHG emissions or overall energy use.
11. **Pledge Element**: One of the ten commitment areas of the Climate Smart Communities Pledge. The certification program uses the Climate Smart Communities Pledge as a framework.
12. **Point**: Each action has a set of points associated with it. Some actions have a range of possible points or tiered points determined by the degree of implementation of the action, whereas others will simply have a total possible point value. Bonus points can be achieved through innovation and performance reporting, as described below.
13. **Priority Actions**: A group of actions which must be completed for each award level. Applicants must complete the required priority actions for each award level along with a minimum number of additional priority actions for each award level.
14. **Registered Climate Smart Community**: A New York State village, city, town or county whose legislative body has adopted the Climate Smart Community Pledge in its entirety.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 1: PLEDGE TO BE A CLIMATE SMART COMMUNITY

Adopt the pledge to reduce GHG (GHG) emissions and adapt to a changing climate. Designate a point person and a Climate Smart Communities task force. Join a regional or national climate campaign focused on reducing GHG emissions or enhancing sustainability.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 1: Pledge to be a Climate Smart Community			**31**	
1.1	Pass a resolution adopting the CSC Pledge	Commit	4	√ (Req)
1.2	Create a community task force focused on climate change mitigation and adaptation	Build capacity	8	√
1.3	Appoint a Climate Smart Community coordinator	Build capacity	8	√ (Req)
1.4	Create an internal green team focused on climate change mitigation and adaptation	Build capacity	8	√
1.5	Join a national or regional climate campaign or program	Build capacity	3	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

1.1 PASS A RESOLUTION ADOPTING THE CSC PLEDGE

Action pathway phase: Commit
Eligibility timeline: Any time prior to the application date
Total possible points: 4
Required priority action for all certification levels

A. Why is this action important?

To ensure commitment at the highest level of the local government, the legislative body of each interested community must pass a resolution adopting the CSC pledge in its entirety.

B. How to implement this action

The local legislative body must adopt a resolution that adopts the CSC Pledge in its entirety. However, the president of each of the five boroughs of New York City may adopt the CSC pledge on behalf of the

borough by proclamation. Local governments may amend the preamble to the pledge, but the pledge itself must remain intact. Questions regarding adoption or rescission of local resolutions may be referred to the Department of State Office of General Counsel (http://www.dos.ny.gov/cnsl/counsel.htm).

C. Time frame, project costs, and resource needs

Implementing this action takes roughly the same time to draft and adopt as other resolutions, the project costs and resources are nominal and dependent upon staff time.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The effort would most likely be led by the department that is responsible for climate action activities, with approval from the top elected official and support from the clerk or the office responsible for supporting the legislative body.

E. How to obtain points for this action

A local government must adopt the CSC Pledge through its typical legislative resolution adoption process.

F. What to submit

Local governments must submit a certified copy of the adopted resolution, with adoption date clearly noted, and any relevant clerk stamps or signatures. The resolution must have been adopted prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, CSC Pledge and Model CSC Pledge Resolution: http://www.dec.ny.gov/energy/65494.html
- Climate Smart Communities, A Guide for Local Officials: http://www.dec.ny.gov/docs/administration_pdf/cscguide.pdf

H. Recertification requirements

Unless the resolution is rescinded by the local legislative body, the community will remain a CSC.

1.2 CREATE A COMMUNITY CLIMATE SMART COMMUNITY TASK FORCE FOCUSED ON CLIMATE CHANGE MITIGATION AND ADAPTATION

Action pathway phase: Build capacity
Eligibility timeline: Currently active
Total possible points: 8
Priority action

A. Why is this action important?

To engage the public, and promote transparency and accountability, local governments should form a community task force consisting of local officials, residents, local government staff members, and other stakeholders to support the planning and implementation of climate action strategies. The task force will act as an advisory board or steering committee, to advise the local government in its climate action actions.

B. How to implement this action

Invite stakeholders from the community that include residents, local government elected officials, local government staff representatives from relevant departments, businesses, academia, philanthropic organizations, organized labor, faith-based groups, and other local interest groups. The task force will serve three purposes: to help the local government define the objectives of the process to develop the climate action plan (or related plan), to contribute technical expertise and other resources to help the local government complete the plan, and to assist with engagement of the public in the creation and implementation of the plan. In addition to the overarching community task force, local governments can consider forming subcommittees of the task force, in order to research or focus on specific details of a strategy or component of a plan. Questions regarding requirements under the Open Meetings Law may be referred to the Department of State Committee on Open Government (http://www.dos.ny.gov/coog/).

C. Time frame, project costs, and resources needs

Establishing a task force should take no more than a couple of months. The project costs are related to staff time. The individual coordinating the task force should have a good understanding of stakeholder groups in the community and who from those stakeholder groups will be best suited to provide the technical expertise to help develop and implement the plan and/or climate action strategies (e.g., a small business owner that sits on the external advisory board can commit to helping engage other small businesses in energy reduction measures).

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Applicable to all types of local governments. The department or office with the responsibility for managing the climate action program is typically responsible for convening and managing the community task force. The task force could be a newly formed group of relevant stakeholders, or it could be an existing group, such as a conservation advisory council, that has climate mitigation and adaptation included in its mission or mandate.

E. How to obtain points for this action

Local governments should form a community task force and actively convene this group to support the development and implementation of climate action strategies. To receive points for this action, local governments must demonstrate that the task force has met at least twice during the year prior to the submittal date.

F. What to submit

Local governments should submit a copy of the memorandum, resolution or executive order establishing the task force, a list of the task force members and the organizations they represent, and meeting minutes from two of the task force meetings held within the past year. If another local committee, e.g., an energy task force or conservation advisory council is to serve as the CSC task force, the local government should submit a copy of the resolution or executive order indicating so.

G. Links to additional resources or best practices

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

- 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

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements, although local governments are not required to pass a new resolution or amend the existing resolution, if one exists. To qualify for recertification, local governments must demonstrate that the task force has met at least twice during the year prior to the submittal date and provide an update to the membership list.

1.3 APPOINT A CLIMATE SMART COMMUNITY COORDINATOR

Action pathway phase: Build capacity
Eligibility timeline: Currently active / position filled
Total possible points: 8
Required priority action for all certification levels

A. Why is this action important?

To ensure steady progress on local climate action, a staff member or team should take ownership over the climate action program and ensure that progress is ongoing. The CSC coordinator can be a part-time or full-time position within local government, or a volunteer could assume the CSC coordinator role. In most cases, the CSC coordinator would chair the CSC task force (Action 1.2), be a member of the green team (Action 1.4) and serve as a liaison between the CSC task force and the chief executive officer and other elected officials.

B. How to implement this action

Identify the individual responsible for climate action activities.

C. Time frame, project costs, and resources needs

Determine the individual best suited to serve as the CSC coordinator taking into account his or her capacity to execute the tasks associated with this role. Depending on the responsibilities for the position, determine if it is most appropriate to create a new full-time position or assign the responsibilities to an existing staff member. Consider the staff member's availability for additional responsibilities, knowledge of climate and sustainability topics, experience with project management and coordination, and experience with leading and facilitating task forces and working groups. Neighboring small local governments may consider collectively hiring one dedicated coordinator to share.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Applicable to all types of local governments. The office of the highest elected official typically has the responsibility of assigning someone to this role.

E. How to obtain points for this action

Local governments should appoint a staff member to act in the role of CSC coordinator.

F. What to submit

Local governments should submit documentation demonstrating that a staff member or volunteer has been appointed to serve as the local government's CSC coordinator and is actively functioning in this role. Documentation could include an executive memorandum, resolution, meeting minutes, job description, or an organizational chart. The position must be currently filled to earn points for this action.

G. Links to additional resources or best practices

- DEC's How to Set Up a Climate Smart Coordinator or Task Force: http://www.dec.ny.gov/energy/65489.html
- ICLEI Climate and Sustainability Coordinator Job Descriptions: http://www.icleiusa.org/action-center/financing-staffing/sample-job-descriptions

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

1.4 CREATE AN INTERNAL GREEN TEAM FOCUSED ON CLIMATE MITIGATION AND ADAPTATION

Action pathway phase: Build capacity
Eligibility timeline: Currently active
Total possible points: 8
Priority action

A. Why is this action important?

To drive activity, engagement must occur at many levels in all departments. Local governments should create an internal green team and involve staff members from all relevant departments in the climate action planning and implementation process, for developing both a government operations and community climate action plan. Some members of the green team can also be members of the CSC task force (Action 1.2). This overlap will create a platform through which staff can exchange ideas and coordinate efforts, ultimately creating a clearer path forward and saving time and money.

B. How to implement this action

The chief elected official should direct relevant department directors to assign at least one staff person from each department to serve on the green team, explaining the creation of this internal group and its purpose. Green team members should be involved in implementing energy efficiency, climate action, or sustainability strategies for their department. The chief elected official should also assign a green team chair. The green team chair may be the CSC coordinator if that coordinator is a municipal employee.

C. Time frame, project costs, and resource needs

Creating a green team should take roughly one to two months between the initial executive direction to the department directors and the first meeting. Costs and resources needed to create a green team are nominal and are generally related only to staff time.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all local governments. The green team is led by a person appointed by the chief executive officer and could be the CSC coordinator (if a local government employee) or the head of one of the participating departments. The chief elected official should convene the green team initially and provide its charge. The green team is typically composed of representatives from departments such as transportation, public works, environment, sanitation, planning, economic development, and others.

E. How to obtain points for this action

Local governments should form a green team with a group of representatives from various local government departments, and actively convene this group to support the development and implementation of climate action strategies. Green team meetings may be part of other recurring meetings, such as department head meetings but should be held on a regular basis.

F. What to submit

Local governments should submit a list of green team members, agendas, and meeting minutes, demonstrating the active involvement of the green team in the development and/or implementation of climate action strategies within the past year. The green team must have met at least three times within the year prior to the submittal date to receive points for this action and submit the required documentation for those three meetings.

G. Links to additional resources or best practices

- DEC's How to Set Up a Climate Smart Coordinator or Task Force: http://www.dec.ny.gov/energy/65489.html
- 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
- Sustainable New Jersey Green Team Resources: http://www.sustainablejersey.com/grants-resources/green-team-resources-and-presentations/
- Sustainable Maryland, Growing Your Green Team Guidebook: http://www.sustainablejersey.com/fileadmin/media/Grants_and_Resources/Green_Team_Resources/Getting_Your_Green_Team_Started/SMC_Green_Team_Handbook_Sept2011.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

1.5 JOIN A NATIONAL OR REGIONAL CLIMATE CAMPAIGN OR PROGRAM

Action pathway phase: Build capacity
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Joining a national or regional campaign allows a local government to further demonstrate its commitment to climate action, share best practices, learn from others, and receive direct technical assistance, as applicable.

B. How to implement this action

Research regional, state, and national energy and climate campaigns that provide a platform for the local government to obtain resources to help further its energy and climate goals. Resources can include peer-to-peer support, tools, sample policies, guidance documents, etc.

C. Time frame, project costs, and resource needs

Local government staff should spend no more than a few hours researching campaigns, obtaining approval to join them from their manager (if necessary), and subscribing to the campaigns. Costs and resource needs are dependent on the program; some require membership fees and detailed reporting. Staff time will also depend on the program.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all local governments. Typically, this is led by the CSC Coordinator or the green team.

E. How to obtain points for this action

Make a commitment to or join another regional or national campaign with a demonstrated commitment to reduction of greenhouse gas emissions and adaptation to effects of climate change. In addition to participating in the Climate Smart Communities program, local governments are encouraged to be actively involved in at least one additional climate campaign or program. Possible campaigns or programs include, but are not limited to, the following:

- ICLEI-Local Governments for Sustainability USA: http://www.icleiusa.org/
- The Climate Registry: http://www.theclimateregistry.org/
- Northern Westchester Energy Action Coalition: http://www.nweac.org/
- Southern Westchester Energy Action Consortium: http://www.sweac.org/
- Urban Sustainability Directors Network: http://usdn.org/home.html?returnUrl=%2findex.html
- STAR Communities: http://www.starcommunities.org/
- Carbon Disclosure Project Cities Program: https://www.cdproject.net/en-US/Programmes/Pages/cdp-cities.aspx

- ICLEI Climate Resilient Communities: http://www.icleiusa.org/climate_and_energy/Climate_Adaptation_Guidance/climate-resilient-communities-program

F. What to submit

Provide a list of campaigns or programs joined with the date joined and demonstration of the local government's active engagement within the past year such as membership invoices, summary of services obtained, report on progress of actions related to campaign, presentations or materials used or delivered to and from the campaign. If the campaign or program is not included in the above list, provide a description of how the campaign supports climate efforts. Campaigns that deny consensus climate science or advocate maladaptive responses to climate change are not eligible.

G. Links to additional resources or best practices

Links for relevant campaigns and programs are provided above.

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

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PLEDGE ELEMENT 2: SET GOALS, INVENTORY EMISSIONS, PLAN FOR CLIMATE ACTION

Gather data about local GHG emission sources. Develop baseline emissions inventories for government operations and the community. Establish quantifiable GHG emissions reduction target(s). Propose an emission reduction schedule and financing strategy. Develop a local action plan for reducing emissions.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 2: Set goals, inventory emissions, plan for climate action			**40**	
Establish a Baseline			**16**	
2.1	Develop a government operations GHG emissions inventory	Assess, Plan, Govern	8	√
2.2	Develop a community GHG emissions inventory	Assess, Plan, Govern	8	√
Set Goals			**8**	
2.3	Establish a government operations emissions reduction target	Assess, Plan, Govern	4	√
2.4	Establish a community emissions reduction target	Assess, Plan, Govern	4	√
Develop a Plan			**16**	
2.5	Develop a government operations climate action plan	Assess, Plan, Govern	8	√
2.6	Develop a community climate action plan	Assess, Plan, Govern	8	√

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Establish a Baseline

2.1 DEVELOP A GOVERNMENT OPERATIONS GHG EMISSIONS INVENTORY

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 8
Priority action

A. Why is this action important?

One of the first steps in the climate action process is establishing a baseline from which to set goals and measure progress. The baseline GHG inventory provides the local government the data needed to prioritize actions that will offer the best return on investment, whether through cost, energy consumption, or GHG emissions savings. Local governments should develop a GHG emissions inventory for their government operations by selecting an appropriate baseline year, gathering the data, and developing an inventory report. This analysis creates the platform to adopt realistic GHG, energy use, and cost saving goals and prioritize actions in a climate action plan (or similar plan). The results of the inventory should be publicly released.

B. How to implement this action

Conduct a GHG emissions inventory of government operations for all applicable sources of Scope 1 (direct) and Scope 2 (indirect) emissions. Reporting Scope 3 emissions is optional, though highly encouraged. However, some voluntary reporting programs require reporting of emissions from specified Scope 3 emissions sources. Local governments should use the Local Government Operations Protocol (LGOP) to complete this action. Developing a GHG inventory is a data-intensive and time-consuming task. Engaging an intern or assigning specific hours of existing staff to support this task will contribute to timely completion of the inventory. There are a number of resources available to assist with developing a GHG emissions inventory. A summary of the steps is found below:

- Determine GHG inventory boundaries- what does the local government have operational control over?
- Confirm baseline year, the LGOP will suggest a calendar year
- Identify emissions sources (e.g. buildings, vehicles, streetlights, waste)
- Request data for the baseline year, providing data collection templates can save time and prevent confusion
- Once received, thoroughly review all data for completeness and accuracy, make sure all data are provided for all facilities and departments, and for the correct timeframe
- Input information into a GHG inventory tool or spreadsheet with emissions coefficients to quantify GHG emissions
- Perform a quality review of all equations, referred to as a quality assurance/quality control review (QA/QC)
- Finalize data
- Report results

C. Time frame, project costs, and resource needs

Conducting a GHG emissions inventory of government operations can take from a few months to over a year depending on the complexity of the local government structure, data availability and quality, and staff capacity. Project costs are staff and consultant time, if applicable. The time required will be reduced significantly as data collection procedures improve and staff becomes familiar with the process.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Conduct a GHG inventory of government operations that follows the Local Government Operations Protocol and includes all Scope 1 and 2 GHG emissions sources relevant to that local government.

F. What to submit

Each CSC must submit a copy of its most recent local government operations GHG inventory report. These can be standalone documents or included in inventory reports that also cover community emissions. The inventory must have been completed within five years prior to the application date.

G. Links to additional resources or best practices

- CSC How to: Local GHG Inventories: http://www.dec.ny.gov/energy/57176.html
- Local Government Operations Protocol: http://www.theclimateregistry.org/resources/protocols/local-government-operations-protocol/
- CSC Local Government Operations Greenhouse Gas Emissions Inventory Tool: http://www.midhudsoncsc.org/resources.html
- ICLEI-Local Government for Sustainability USA guidance documents on conducting a GHG emissions inventory for local government operations: http://www.icleiusa.org/climate_and_energy/climate_mitigation_guidance/steps-to-complete-a-local-government-operations-inventory
- The Climate Registry: http://www.theclimateregistry.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

2.2 DEVELOP A COMMUNITY GHG EMISSIONS INVENTORY

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 8
Priority action

A. Why is this action important?

The first steps in the climate action process are to understand the sources of emissions and establish a baseline against which to set goals and measure progress. Typically, the local government operations are a small portion of the overall community GHG emissions. It is therefore important to understand how all of the industry, businesses and individual homes and vehicles are contributing to climate change. Once that is determined, the local government can focus policy action and incentive programs on those sectors that have the most opportunity to reduce GHG emissions.

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.

B. How to implement this action

Each local government should develop a GHG inventory for the community as a whole by selecting an appropriate baseline year, gathering the data, and developing an inventory report. This analysis will help the local government prioritize actions. Scope 1 and 2 emissions should be assessed and reported, although Scope 3 emissions are optional. The report should be publicly released. Local governments can follow the U.S. Community Protocol, for guidance on how to conduct a community inventory and what to include.

A summary of the key steps in developing a community GHG inventory are as follows:

- Determine GHG inventory boundaries- what does the local government have operational control over?
- Confirm baseline year, using the calendar year of the local government operations inventory is a good idea
- Identify emissions sources (e.g. buildings, transportation, waste)
- Request data for the baseline year, providing data collection templates can save time and prevent confusion
- Once received, thoroughly review all data for completeness and accuracy- if your community has limited industrial facilities, but there appears to be an incredibly high percentage of energy use from that sector, there might be errors in the data
- Input information into GHG Inventory tool or spreadsheet with emissions coefficients to quantify GHG emissions

- Perform a quality review of all equations, referred to as a quality assurance/quality control review (QA/QC)
- Finalize data
- Report results

C. Time frame, project costs, and resource needs

Conducting a GHG emissions inventory of the community as whole can take anywhere between a couple months to over a year depending data availability and quality and staff capacity. Project costs will include staff time, but could also include time for an intern or consultant to assist, as well as potential cost for a GHG inventory tool.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning, with assistance from the CSC task force. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Complete a community-wide GHG inventory that follows the U.S. Community Protocol. Local governments may earn points for this action by submitting the relevant Climate Smart Communities or Cleaner, Greener Communities allocated regional inventory, noting the inventory results for their specific jurisdiction (as long as the inventory was developed within the eligibility timeline for this action).

F. What to submit

Each CSC must submit a copy of its most recent community GHG inventory report. This can be a standalone document or included in an inventory report that also covers government operations emissions. The inventory must have been completed within five years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Local GHG Inventories: http://www.dec.ny.gov/energy/57176.html
- ICLEI- Local Government for Sustainability USA guidance documents on conducting a GHG emissions inventory: http://www.icleiusa.org/tools/ghg-protocol/community-protocol/us-community-protocol-for-accounting-and-reporting-of-greenhouse-gas-emissions
- U.S. Community Protocol for Accounting and Reporting of GHG Emissions: http://www.icleiusa.org/tools/ghg-protocol/community-protocol
- Climate Smart Communities and Cleaner Greener Communities Regional Inventories:
  - Mid-Hudson Regional Greenhouse Gas Emissions Inventory (2012): http://www.dec.ny.gov/docs/administration_pdf/midhudghginventory.pdf
  - Capital District 2010 Regional Inventory,(2013): http://www.dec.ny.gov/docs/administration_pdf/capdistghginven.pdf

- Central New York Greenhouse Gas Emissions Inventory (2012): http://www.dec.ny.gov/docs/administration_pdf/cnymethod.pdf
- Long Island 2010 Regional Inventory: http://www.dec.ny.gov/docs/administration_pdf/liregghginven.pdf
- Finger Lakes CGC Plan Report: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans/Finger-Lakes.aspx
- Mohawk Valley CGC Plan Report: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans/Mohawk-Valley.aspx
- North Country CGC Plan Report: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans/North-Country.aspx
- Southern Tier CGC Plan Report: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans/Southern-Tier.aspx
- Western New York CGC Plan Report: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans/Western-New-York.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Set Goals

2.3 ESTABLISH A GOVERNMENT OPERATIONS EMISSIONS REDUCTION TARGET

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4
Priority action

A. Why is this action important?

To help drive action and measure progress, local governments ought to establish GHG emission reduction targets for their government operations. Many local governments choose to establish short- and long-term targets, to set more immediate and far-reaching goals. The short-term targets help to ensure that action is taken in the near term, whereas long-term targets, such as New York State's target of reducing emissions 80 percent below 1990 baseline levels by 2050, can set the stage for major planning initiatives and investments designed to dramatically reduce energy use and emissions. Local governments are encouraged to establish targets similar to neighboring communities, the region, and the state. Adopting GHG reduction targets shows the degree of progress the local government makes over time and allows the local government to adjust its course of action if goals are surpassed or not fulfilled.

B. How to implement this action

Research and adopt short-, medium-, and long-term GHG reduction targets in a resolution or in a climate action plan or comparable plan such as a comprehensive plan.

A baseline emissions inventory is needed to establish an emissions reduction target, so the community has a means of measuring progress against the baseline. A GHG emissions forecast, often included in a baseline emissions inventory report, is also useful for anticipating changes in GHG emissions from population change, technology changes, or economic impacts on emissions.

C. Time frame, project costs, and resource need

Establishing a GHG emissions reduction target(s) often takes place during the creation of a climate action plan. The goals and strategies in a climate action plan inform one another. Project costs involve primarily staff time, and resources needed are data from the GHG emissions inventory and software such as Microsoft Excel to develop a model to project GHG emissions.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments must establish a GHG emissions reduction target for government operations; however, it is in the local government's best interest to establish short-, medium-, and long-term reduction goals.

F. What to submit

Local governments must submit copies of formal documentation, such as a council resolution, report, formally adopted plan or memorandum stating the established emissions reduction target(s) for government operations. The targets can be established at any time prior to the application date, as long as they are currently valid.

G. Links to additional resources or best practices

- ICLEI-Local Governments for Sustainability USA's guidance on creating GHG emissions reduction targets: http://www.icleiusa.org/climate_and_energy/climate_mitigation_guidance/climate-mitigation-milestone-two
- ICLEI's Climate and Air Pollution Planning Assistant: http://www.icleiusa.org/tools/cappa/climate-and-air-pollution-planning-assistant-cappa
- New York State GHG Reduction Target and Climate Action Plan Interim Report: http://www.dec.ny.gov/energy/80930.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

2.4 ESTABLISH A COMMUNITY EMISSIONS REDUCTION TARGET

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4
Priority action

A. Why is this action important?

To help drive action and measure progress, local governments ought to establish GHG emissions reduction targets for the community as a whole. Many local governments choose to establish short-term targets and long-term targets, to set both immediate and far reaching goals. The short-term targets help to ensure that action is taken in the near-term, whereas long-term targets, such as reducing emissions 80 percent below baseline levels by 2050, can set the stage for major planning initiatives and investments designed to dramatically reduce energy use and emissions. Local governments are encouraged to establish targets similar to neighboring communities, the region, and the state.

B. How to implement this action

Research and adopt short-, medium-, and long-term GHG reduction targets in a resolution, climate action plan, or comparable plan such as a comprehensive plan. If a target has already been established for the region, local governments should demonstrate how they have agreed to either meet or exceed this target.

A baseline emissions inventory is needed to establish an emissions reduction target, so the community has a means of measuring progress against the baseline. A GHG emissions forecast, often included in a baseline emissions inventory report, is also useful for anticipating changes in GHG emissions from population change, technology changes, or economic impacts on emissions.

C. Time frame, project costs, and resource needs

Establishing a GHG emissions reduction target(s) often takes place during the creation of a climate action plan. The goals and strategies in a climate action plan inform one another. Project costs involve primarily staff time, and resources needed are data from the GHG emissions inventory and software such as Microsoft Excel to project GHG emissions.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments must establish a GHG emissions reduction target for the community as a whole; however, it is in the local government's best interest to establish short-, medium-, and long-term reduction goals.

F. What to submit

Local governments should submit a copy of any formal documentation, such as a council resolution, report, adopted plan or memorandum stating the established emissions reduction target(s) for the community. The targets can be established at any time prior to the application date, as long as they are currently valid.

G. Links to additional resources or best practices

- Climate Smart Communities, Develop a Local Climate Action Plan: http://www.dec.ny.gov/energy/67101.html
- ICLEI Pathways: http://www.icleiusa.org/climate_and_energy/climate_mitigation_guidance
- New York State Climate Action Planning: http://www.dec.ny.gov/energy/80930.html Autodesk, Inc., C-FACT for Cities: http://www.autodesk.com/sustainable-design/sustainability-solutions/cfact-cities

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Plan for Climate Action

2.5 DEVELOP A GOVERNMENT OPERATIONS CLIMATE ACTION PLAN

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 8
Priority action

A. Why is this action important?

Local governments should develop a plan for reducing emissions from their own operations to prioritize actions and gather support for short- and long-term investments, policies, projects, and programs aimed at conserving energy and reducing GHG emissions. The plan should outline the policies, programs, and projects needed to achieve the government's emissions reduction target(s). Local governments are encouraged to develop government operations plans, so they can lead by example when seeking to implement community-wide measures.

Local governments are encouraged to incorporate climate adaptation planning into their climate action plan. However, for the purpose of this certification program, climate adaptation planning is addressed in Action 7.4, Develop Climate Adaptation Strategies.

B. How to implement this action

Develop a plan that includes the results of the GHG emissions inventory for local government operations, the GHG emissions reduction targets for local government operations, and how the combined GHG reductions from plans, policies, and actions will allow the local government to achieve the GHG reduction targets.

C. Time frame, project costs, and resource needs

Crafting a climate action plan for government operations will take roughly six to 12 months based on staff capacity, availability of data and information, and level of public engagement. Project costs include staff time and possibly consultants to support the development of the plan, along with printing charges if the local government elects to publish hard copies of the plan.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments can earn points for this action by taking the following steps:

	Possible Points
• Perform public outreach and public review of draft plan	4
• Develop and publicly release a government operations climate action plan	4

F. What to submit

A government operations climate action plan can be a standalone document, part of a community climate action plan, a sustainability plan, or another existing plan such as a strategic plan. Local governments should submit a publicly released plan that outlines the steps that the government will take to reduce emissions, along with documentation, either in the plan or separately, that demonstrates that the local government performed public outreach and/or made the draft plan publicly available for comment. The contents of the plan must be substantially consistent with guidance provided by the CSC program (see link below) and must have been released within five years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, 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
- California Statewide Energy Efficiency Collaborative climate action plan template: http://www.icleiusa.org/library/documents/SEEC_Climate%20Action_Planning_Templates.zip/view

H. Recertification requirements

Local governments must submit a climate action plan that was developed or updated within ten years prior to the application date.

2.6 DEVELOP A COMMUNITY CLIMATE ACTION PLAN

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 8
Priority action

A. Why is this action important?

To gather support from the community and key stakeholders, local governments should develop a community-wide climate action plan for reducing emissions. This plan should outline the policies, programs, and projects needed to achieve the community's emissions reduction target(s). A successful climate action plan provides implementation plans on specific strategies aimed at reducing emissions and was developed following a comprehensive process involving engagement from a wide range of stakeholders.

Local governments are encouraged to incorporate climate adaptation planning into their climate action plan. However, for the purpose of this certification program, climate adaptation planning is addressed in Action 7.4, Develop Climate Adaptation Strategies.

B. How to implement this action

Develop a plan that includes the results of the GHG emissions inventory for the community as a whole, the GHG emissions reduction targets for the community as a whole, and how the combined GHG reductions from plans, policies, and actions will achieve the GHG reduction goals for the community as a whole. Climate action plans must be coordinated with existing community plans and programs to avoid undermining them. There are specific procedural requirements for incorporating a climate action plan into an existing comprehensive plan. CSCs are encouraged to contact the DOS Office of General Counsel for guidance on such actions (http://www.dos.ny.gov/cnsl/counsel.htm) .

C. Time frame, project costs, and resource needs

Crafting a climate action plan for the community as a whole will take roughly six to 12 months based on staff capacity, availability of data and information, and level of public engagement. Project costs include staff time and possibly consultants to support the development of the plan, along with printing charges if the local government elects to publish hard copies of the plan. Larger public outreach events could also result in costs for marketing materials or other event related expenses.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate and sustainability efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments can earn points for this action by taking the following steps:

	Possible Points

- Perform public outreach and public review of draft plan 4
- Develop and publicly release a community climate action plan 4

F. What to submit

A community climate action plan can be a standalone document, combined with a government operations climate action plan, or incorporated into a sustainability plan, strategic plan, or a comprehensive plan. Local governments should submit a publicly released plan that outlines the steps that the community will take to reduce emissions, along with documentation, either in the plan or separately, that demonstrates that the local government performed public outreach or made the draft plan publicly available for comment. The contents of the plan must be substantially consistent with guidance provided by the CSC program (see link below) and must have been released within five years prior to the application date. Points will not be awarded for maladaptive measures.

G. Links to additional resources or best practices

- 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
- California Statewide Energy Efficiency Collaborative climate action plan template: http://www.icleiusa.org/library/documents/SEEC_Climate%20Action_Planning_Templates.zip/view

H. Recertification requirements

Local governments must submit a climate action plan that was developed or updated within ten years prior to the application date.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 3: DECREASE COMMUNITY ENERGY USE

Adopt specific energy reduction goals that are at least as aggressive as the state's current goals. Take action to reduce energy demand in existing public facilities, infrastructure, and vehicle fleets, and to maximize energy efficiency in new public facilities. Reduce waste and increase recycling in government operations. Encourage and support action by local government employees to meet energy use reduction goals.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 3: Decrease community energy use			**138**	
Building and Stationary Equipment			**55**	
3.1	Conduct energy audits of local government buildings	Assess, Plan, Govern	8	√
3.2	Upgrade interior lighting	Implement	5	
3.3	Upgrade HVAC equipment	Implement	5	
3.4	Install water-efficient fixtures	Implement	4	
3.5	Install a building energy management system (EMS)	Implement	5	
3.6	Upgrade building envelope	Implement	7	
3.7	Adopt a green building standard for local government buildings and facilities	Assess, Plan, Govern	4	
3.8	Build a new green building	Implement	10	
3.9	Upgrade water or wastewater treatment facilities and infrastructure	Implement	7	
Fleet and Vehicle Fuel			**18**	
3.10	Adopt a vehicle fleet efficiency policy	Assess, Plan, Govern	3	
3.11	Right-size the local government fleet	Implement	3	
3.12	Replace traditional vehicles with advanced vehicles	Implement	5	

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
3.13	Adopt an anti-idling policy for government vehicles	Assess, Plan, Govern	3	
3.14	Implement a car-sharing program for local government staff	Implement	4	
Outdoor Lighting			**17**	
3.15	Convert streetlights to LED	Implement	5	
3.16	Convert traffic signals to LED	Implement	4	
3.17	Reduce number of outdoor lighting fixtures	Implement	4	
3.18	Upgrade outdoor lighting (other than streetlights and traffic signals) to more efficient and/or solar technology	Implement	4	
Government Solid Waste			**13**	
3.19	Adopt a waste management strategy for government hosted and permitted events	Assess, Plan, Govern	2	
3.20	Provide recycling bins next to all trash receptacles in local government buildings	Implement	3	
3.21	Provide organic waste collection and composting in local government buildings	Implement	3	
3.22	Provide e-waste collection in local government buildings	Implement	3	
3.23	Conduct a local government waste audit and track diversion rate over time	Assess, Plan, Govern	2	
Financial and Policy Mechanisms			**18**	
3.24	Adopt an environmentally preferable purchasing policy	Assess, Plan, Govern	4	
3.25	Establish a financing mechanism for energy efficiency and renewable energy projects in government-owned buildings	Implement	5	
3.26	Incorporate energy efficiency and waste handling provisions in standard specifications and government contracts	Assess, Plan, Govern	3	
3.27	Utilize a green or sustainability rating system for infrastructure improvement projects	Implement	6	
Employee/Staff Behavior			**8**	
3.28	Subsidize and incentivize employee alternative commuting	Implement	3	
3.29	Engage employees through a green pledge or competition	Implement	2	
3.30	Incorporate green principles, commitments or requirements into staff training	Implement	3	
Energy and GHG Management Policies and Systems			**9**	

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
3.31	Implement an energy or GHG management system	Implement	5	
3.32	Adopt an energy benchmarking requirement for government-owned buildings	Implement	4	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Buildings and Stationary Equipment

3.1 CONDUCT ENERGY AUDITS OF LOCAL GOVERNMENT BUILDINGS

Action pathway phase: Assess, Plan, and Govern
Eligibility timeline: Within 7 years prior to the application date
Total possible points: 8
Priority action

A. Why is this action important?

Energy use in buildings is often the largest source of energy consumption and GHG emissions within government operations. Buildings contain heating, ventilation and air conditioning (HVAC) equipment, lighting, information technology equipment, appliances, motors, and pumping equipment. All of these consume energy and provide many opportunities for improved energy efficiency. Especially in communities with older building stock, energy audits are an important step in identifying building inefficiencies and developing plans for improvement.

B. How to implement this action

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)has developed a phased approach to auditing a building's energy use, starting with a walk-through or preliminary assessment, called a Level-1 audit. A Level-1 audit involves brief interviews with site operating personnel, a review of the facility's utility bills and other operating data, and an abbreviated walk-through of the building. The ASHRAE Level-1 audit is geared toward the identification of the potential for energy improvements, understanding the general building configuration, and defining the type and nature of energy systems.

The next step is an ASHRAE Level-2 audit, which evaluates the building energy systems in detail to define a variety of potential energy-efficiency improvements. This evaluation should include the building envelope; lighting; heating, ventilation, and air conditioning equipment; domestic hot water; plug loads; and compressed air and process uses (for manufacturing, service, or processing facilities).

Local governments should pursue ASHRAE Level-2 energy audits for their buildings that are more than 10 years old. Level-2 energy audits go deeper than a Level-1 walk-through audit to summarize existing conditions, recommend energy conservation measures (ECMs) and provide estimated cost

and payback information for those measures. When implemented, these ECMs can help a local government realize significant energy and cost savings while also reducing its GHG emissions. A local government may choose to audit one building at a time or to conduct an audit of several buildings. This action is focused on the critical first step of completing audits. Other actions award credit for implementation of specific measures. To implement this action, the local government should take the following steps:

1. Identify a certified energy auditor
2. Carry out the building energy audits, starting with the largest energy-consuming buildings
3. Obtain a summary audit report, complete with ECM recommendations from the auditor for each building or set of buildings audited

An energy audit may also be conducted as the first phase of an energy performance contract, which is a contract and financing mechanism that uses the savings from the contracted energy efficiency improvements to finance the improvements. If a local government is considering pursuing a performance contract, credit for this action could be achieved through the energy audits completed under that contract.

C. Time frame, project costs, and resource needs

The local government can begin to schedule energy audits at any time. Energy audits should be low cost or free to local governments through resources provided by their utilities or NYSERDA. Facilities staff should be available to guide an auditor through the building(s) and will likely be required to provide building information and utility bills to the auditor.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates buildings. Some level of building auditing is required and energy audits of older buildings that have not been upgraded in many years are highly recommended. Facilities managers or the building division within a public works department would likely be responsible for implementing.

E. How to obtain points for this action

Points are obtained for this action by conducting either Level 1 or Level 2 audits at one or more local government buildings. The percentage of buildings audited can be calculated based on either the simple percentage of buildings, or the percent of square footage of the total applicable building portfolio (buildings more than 7 years old).

For Level 1 audits	Possible Points
• ASHRAE Level-1 energy audit completed at 10% of buildings more than 7 years old	1
• ASHRAE Level-1 energy audit completed for 25% of buildings more than 7 years old	3
• ASHRAE Level-1 energy audit completed for 50% of buildings more than 7 years old	4

• ASHRAE Level-1 energy audit completed for 75% of buildings more than 7 years old	5
• ASHRAE Level-1 energy audit completed for 90% or more of all buildings more than 7 years old	6

For Level 2 audits	Possible Points
• ASHRAE Level-2 energy audit completed at 10% of buildings more than 7 years old	3
• ASHRAE Level-2 energy audit completed for 25% of buildings more than 7 years old	5
• ASHRAE Level-2 energy audit completed for 50% of buildings more than 7 years old	6
• ASHRAE Level-2 energy audit completed for 75% of buildings more than 7 years old	8

F. What to submit

Provide digital copies of the energy audit report for each building (or group of buildings) where an audit was performed. Audits must have been conducted within seven years prior to the application date. If several buildings were audited, local governments may submit a summary report as long as it provides the key findings and recommendations for each facility. Local governments must be specific as to which type of audit was performed for which building.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- NYSERDA FlexTech Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/FlexTech-Program.aspx
- NYSERDA Existing Facilities Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/Existing-Facilities-Program.aspx
- "A Guide to Energy Audits," Pacific Northwest National Laboratory: http://www.pnnl.gov/main/publications/external/technical_reports/pnnl-20956.pdf
- The Difference Between ASHRAE Level 1, 2, and 3 Audits: http://www.microgrid-solar.com/2010/11/the-difference-between-ashrae-level-1-2-3-energy-audits/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.2 UPGRADE INTERIOR LIGHTING

Action pathway phase: Implement
Eligibility timeline: Within 7 years prior to application date
Total possible points: 5

A. Why is this action important?

Lighting represents 35 percent of total commercial building electricity use.[1] Upgrading to more efficient lighting will save money and reduce indirect GHG emissions associated with electricity consumption.

B. How to implement this action

Evaluate existing lighting throughout local government buildings and identify opportunities to upgrade to more efficient, longer lasting options. Recommendations for interior lighting upgrades will be provided in an energy audit (*see Action 3.1*). If the audit is more than two years old, it is highly recommended that an energy specialist or lighting specialist provide updated recommendations based on the latest available lighting technologies. If an audit has not been done, but the local government wants to pursue lighting upgrades, the following are a sample of efficient interior lighting options:

- Compact fluorescents
- T5 or T8 linear tube fluorescents
- Light-emitting diode (LED) fixtures and bulbs
- High intensity discharge (HID), (high pressure sodium, metal halide), only applicable in certain settings

C. Time frame, project costs, and resource needs

Lighting upgrades tend to have a relatively short payback period and newer lighting options, such as fluorescents and LEDs, last longer, thus reducing replacement and maintenance costs. Costs for lighting upgrades are lower if replacement of fixtures is not necessary in addition to replacement of ballasts and lamps. A local government may have the staff and resources to do the lighting upgrade work in-house or may opt to hire a contractor. In either case, ensure that you have applied for all available rebates or incentives provided through your utility or NYSERDA.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Facilities managers or the building division within a public works department would likely be responsible for implementing this action and must work with procurement staff for purchase of lighting products and possibly the procurement of a lighting contractor.

E. How to obtain points for this action

Local governments can earn points for this action by upgrading lighting in government buildings to exceed the ASHRAE Energy Standard for Buildings Except Low-Rise Residential Buildings, 90.1

[1] U.S. EPA, Energy Star. http://www.energystar.gov/index.cfm?c=business.EPA_BUM_CH6_Lighting

(https://www.ashrae.org/resources--publications/bookstore/standard-90-1-document-history#2007) by at least 3 percent.

Local governments must provide information on the number of lighting fixtures or square footage of government buildings that has been upgraded. If local governments do not know the number of fixtures that were upgraded, they can use the percentage of total building portfolio square as a proxy for estimating the scope of the upgrades.

	Possible Points
• Upgrade 5% of lighting fixtures or square footage	1
• Upgrade 10% of lighting fixtures or square footage	2
• Upgrade 30% of lighting fixtures or square footage	3
• Upgrade 50% of lighting fixtures or square footage[2]	4
• Upgrade 70% of lighting fixtures or square footage	5

Local governments can also receive points for this action for newer buildings built within the last seven years that have energy efficient lighting fixtures that exceed ASHRAE 90.1 by 3%, at a minimum. Points are awarded based on the proportion of square footage of total buildings, as described above.

F. What to submit

Provide a list of the type and number of lighting units replaced with more efficient units, including the replacement type and the location of the replacements and when the replacement was made. Provide an estimate of percentage of total indoor lighting in government buildings that has been upgraded. If this specific information is not available, local governments should submit information on the square footage upgraded. The upgrades must have been performed within seven years prior to the application date.

For buildings built within the past five years, local governments should submit documentation demonstrating that the lighting in the building exceeds the specified ASHRAE 90.1standard by at least 3 percent.

G. Links to additional resources or best practices

- ASHRAE Energy Standard for Buildings Except Low-Rise Residential Buildings, 90.1: https://www.ashrae.org/resources--publications/bookstore/standard-90-1-document-history#2007
- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- NYSERDA FlexTech Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/FlexTech-Program.aspx

[2] Fixture replacements must comply with ECCCNYS Section 101.4.3 when 50 percent or more of fixtures are replaced.

- NYSERDA Existing Facilities Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/Existing-Facilities-Program.aspx
- EPA's Building Upgrade Manual, Lighting chapter: http://www.energystar.gov/index.cfm?c=business.EPA_BUM_CH6_Lighting
- List of energy efficient lighting products: http://www.energystar.gov/index.cfm?c=lighting.pr_lighting_landing http://designlights.org/solidstate.about.QualifiedProductsList_Publicv2.php

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.3 UPGRADE HVAC EQUIPMENT

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 5

A. Why is this action important?

HVAC equipment represents 30 to 40 percent of commercial building energy use and provides numerous opportunities to improve efficiency and overall occupant comfort, saving money and reducing GHG emissions.

B. How to implement this action

Similar to the lighting upgrade action, HVAC upgrade recommendation would likely come out of an energy audit. Aside from those recommendations, a local government may already be aware of the must replace certain pieces of equipment and could earn points for this action by ensuring that the replacement equipment is energy-efficient. Upgrades may include, but are not limited to, the following:

- Boilers
- Chillers
- Heat pumps
- Air handling units
- Compressors
- Fans
- Water heaters

In addition to any energy audit recommendations, there are a number of resources available through NYSERDA and Energy Star related to efficient HVAC equipment, financing upgrades, finding contractors, and more. Additional resources are provided in Section G.

C. Time frame, project costs, and resource needs

HVAC upgrades should be implemented any time existing equipment is outdated or performing inefficiently. Most local governments will want to hire a contractor to evaluate the HVAC needs of a

particular space or building to determine the most energy-efficient equipment option for that space. HVAC upgrades require facilities, or operations and maintenance staff to identify opportunities for upgrades (or gleaning that information from audit reports), draft product and contractor specifications, work with procurement staff, and ensure proper installation and training on maintenance requirements of new equipment.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Facilities managers or the building division within a public works department would likely be responsible for implementation and would coordinate with the procurement department for purchase of equipment or hiring of a contractor.

E. How to obtain points for this action

Local governments can earn points for this action by upgrading HVAC systems in government buildings to exceed ASHRAE Energy Standard for Buildings Except Low-Rise Residential Buildings, 90.1 by 3 percent, at a minimum. Points are earned based on the percentage of total building portfolio square footage affected by the upgrades.

	Possible Points
• Upgrade HVAC equipment for 5% of square footage	1
• Upgrade HVAC equipment for 10% of square footage	2
• Upgrade HVAC equipment for 30% of square footage	3
• Upgrade HVAC equipment for 50% of square footage	4
• Upgrade HVAC equipment for 70% of square footage	5

Local governments can also receive points for this action for newer buildings built within the last ten years that have energy efficient HVAC. Points are awarded according to the proportion of total buildings area upgraded, as described above.

F. What to submit

Provide a list of the equipment items replaced, including the replacement type and location, as well as date of replacement. Include the brand and model number for new and replaced equipment, if available. The upgrade must have been performed within ten years prior to the application date.

For buildings built within the last ten years, local governments should submit documentation demonstrating that the HVAC in the building exceeds the specified ASHRAE 90.1 standard by at least 3 percent.

G. Links to additional resources or best practices

- ASHRAE Energy Standard for Buildings Except Low-Rise Residential Buildings, 90.1: https://www.ashrae.org/resources--publications/bookstore/standard-90-1-document-history#2007
- EPA's *Building Upgrade Manual*, Heating and Cooling chapter: http://www.energystar.gov/index.cfm?c=business.EPA_BUM_CH9_HVAC

- NYSERDA Existing Facilities Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/Existing-Facilities-Program.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.4 INSTALL WATER-EFFICIENT FIXTURES

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 4

A. Why is this action important?

Water efficiency is an important component of energy efficiency. While the connection is not always obvious, energy is used to treat, pump, and distribute, as well as to heat water. When less water is consumed, less energy is required for these activities. Water-efficient fixtures are recommended throughout local government buildings to save money and reduce energy use, in addition to the benefit of overall water conservation.

B. How to implement this action

Water-efficient fixtures are easy to install and generally have a short payback period. Water-efficient fixtures should be installed in bathrooms, kitchens, and any other relevant areas throughout local government buildings. Water-efficient fixtures may include low-flow or dual-flush toilets, faucet aerators, low-flow showerheads, or waterless urinals. Some recommended flow rates are as follows:

- Bathroom Faucets: 1.5 gallon per minute (GPM)
- Kitchen Faucets: (utility sinks, etc.) 1.5 GPM, though higher flow may be necessary for some purposes
- Showerheads: 2 GPM or less
- Toilets: 1.28 GPF or 1.1/1.6 for a dual-flush model

The WaterSense label from EPA is also given for many low-flow products and is typically 20 percent more water-efficient than traditional products.

C. Time frame, project costs, and resource needs

Water-efficient fixtures can be installed any time. It is not necessary to wait until existing fixtures stop working because new, low-flow fixtures will greatly reduce water consumption. Payback for such fixtures is usually very quick, often less than a year or two, though that number will be different if a local government has its own water utility. Toilet replacements require more labor time and up-front investment, as compared to placing aerators on faucets or replacing showerheads. If the local government does not have in-house capacity for these upgrades, it may have to hire a contractor.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Facilities managers or the building division within a public works department would likely be responsible for implementing. If the local government has a water utility, staff from that department may be involved as well.

E. How to obtain points for this action

Points are obtained based on the percentage of total fixtures upgraded to water-efficient fixtures meeting the flow rates specified in Section B. If the percentage of fixtures upgraded is not available, local governments may use the building square footage affected by the upgrades as a proxy.

	Possible Points
• Install water-efficient fixtures for 10% of total fixtures or building square footage	1
• Install water-efficient fixtures for 20% of total fixtures or building square footage	2
• Install water-efficient fixtures for 45% of total fixtures or building square footage	3
• Install water-efficient fixtures for 70% of total fixtures or building square footage	4

Local governments can also receive points for this action for newer buildings built within the last ten years that have energy efficient water fixtures. Points are awarded based on the number of fixtures, or the proportion of square footage of total buildings if the fixtures information is unavailable, as described above.

F. What to submit

Provide a list of the number of fixtures by building, flow rate of the original fixtures, and that of the replacements. Include the brand and model number for new and replaced equipment, if available.

Local governments that do not have detailed records of the number of fixtures replaced may estimate the number of fixtures based on the square footage or number of bathrooms retrofitted. The upgrade must have been performed within ten years prior to the application date.

For facilities built within the last ten years, local governments should submit documentation demonstrating that the water fixtures in the building meet the specified flow rates defined above.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- EPA WaterSense best management practices guide for commercial and institutional buildings: http://www.epa.gov/watersense/commercial/bmps.html
- List of EPA WaterSense water-efficient products: http://www.epa.gov/watersense/products/index.html

- Alliance for Water Efficiency Tip Sheet: http://www.allianceforwaterefficiency.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=5806

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.5 INSTALL A BUILDING ENERGY MANAGEMENT SYSTEM (EMS)

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

Energy efficiency can be achieved, in part, with proper selection of energy-efficient equipment and lighting. However, efficiency can be further optimized when systems are properly synchronized and managed, particularly through the utilization of a centralized energy management system. Energy Management Systems (EMS) are used to monitor, measure, and control energy use in buildings. Individual buildings can have their own EMS, or multiple buildings can be controlled by a central EMS which can manage the HVAC and lighting for the buildings. EMSs can also be used to provide metering, submetering, and monitoring functions to gather and manage energy use.

B. How to implement this action

An energy management system (EMS) should be installed to monitor the ongoing energy use in all buildings or a select group of buildings. Ideally, this system will have controls allowing facility managers to adjust temperatures in various buildings remotely for maximum control. Energy management systems range significantly in what they offer and how they function but ideally use sensors, direct digital controls, setbacks, resets, and other functions to optimize the efficiency of energy-consuming equipment in buildings.

C. Time frame, project costs, and resource needs

Energy management systems vary significantly in price, particularly when considering the number of buildings and equipment types to be managed. An EMS may be installed under a performance contract if that is something the local government is considering. If done separately, the facilities manager for the local government will must work closely with procurement staff to research available systems, companies, installation and ongoing management costs.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government though the benefits of such systems increase with the size of the local government's building portfolio. Facilities managers or the building division within a public works department would likely be responsible for implementation as well as procurement staff.

E. How to obtain points for this action

Points are obtained for this action by installing an EMS in one or more government buildings, and are tiered based on the proportion of the total square footage of buildings managed by the EMS. The EMS must be used for controlling both HVAC and lighting in the buildings. For more simple EMS

systems that only control HVAC or lighting, points will be awarded based on the degree of functionality of the system.

	Possible Points
• Install an EMS in 5% of buildings (by square footage)	1
• Install an EMS in 10% of buildings (by square footage)	2
• Install an EMS in 30% of buildings (by square footage)	3
• Install an EMS in 50% of buildings (by square footage)	4
• Install an EMS in 70% of buildings (by square footage)	5

F. What to submit

Provide reports from the EMS illustrating that it is in use for the number of buildings and square footage noted in the application. Local governments should demonstrate the percentage of square footage covered by the EMS. The EMS must be implemented and currently in use to receive points for this action.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- US DOE Solution Center Webcast, October 15, 2010, Energy Management Systems: Maximizing Energy Savings:
- http://www1.eere.energy.gov/wip/solutioncenter/pdfs/energy_management_systems_maximizing_energy_savings_slides.pdf
- Federal Energy Management Program-O&M Best Practices, A Guide to Achieving Operational Efficiency, Section 9.6 Energy Management/Building Automation Systems: http://www1.eere.energy.gov/femp/pdfs/omguide_complete.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.6 UPGRADE BUILDING ENVELOPE

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 7

A. Why is this action important?

The building's envelope is an important element in maintaining energy efficiency, especially in the climate of the Northeast with significant heating and cooling needs in winter and summer months. The walls, roof, windows, and foundation of a building are all part of its envelope and serve as the

barrier between the indoor and outdoor environments. Thus, the envelope's thermal barrier capabilities will greatly influence the energy necessary to heat and cool the indoor space.

B. How to implement this action

Points are earned for this action by implementing building envelope improvements in government buildings. Envelope improvements could include insulation improvements, air sealing, or window replacements. Improvements must be implemented in a minimum of one building, with additional points earned for improvements made at additional buildings. Windows should be Energy Star rated, and insulation that will provide a high R-value (thermal resistance value) should be installed.

C. Time frame, project costs, and resource needs

Envelope improvements can be done at any time and the energy reduction and thermal comfort benefits will be realized immediately. Some weatherization improvements require minimal financial investment, while others, such as window replacements, can be more costly. Many of these improvements can be completed using in-house staff, though some insulation or window improvements may require specialized contractors depending on the product selected.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government and will likely be led by public works department staff and building engineers.

E. How to obtain points for this action

Local governments can earn points for this action by upgrading the building envelope for government buildings to exceed ASRHAE 90.1 by 3 percent, at a minimum.

Points will be earned for this action based on the square footage of buildings where envelope improvements have been made. For example, if the local government's entire building portfolio is 250,000 square feet, and 2 buildings totaling 50,000 square feet have had envelope improvements, that would be 20 percent of the building square footage. Building envelope improvements could include upgrades to windows, walls, insulation, and roofing.

	Possible Points
• Upgrade building envelope in 5% of buildings (by square footage)	3
• Upgrade building envelope in 10% of buildings (by square footage)	4
• Upgrade building envelope in 30% of buildings (by square footage)	5
• Upgrade building envelope in 50% of buildings (by square footage)	6
• Upgrade building envelope in 70% of buildings (by square footage)	7

Local governments can also receive points for this action for newer buildings built within the last ten years that have been designed with energy efficient building envelopes that meet or exceed the specifications in ASHRAE 90.1 by at least 3 percent. Points are awarded based on the proportion of square footage of total buildings, as described above.

F. What to submit

Provide documentation of the specific improvement made, including building identification and description, installation date, and specifications and purchase documents (receipts of purchase and specifications). In the case of windows and insulation, the local government must document the R or U value (thermal resistance value) and the improvement in that value over that replaced. The upgrade must have been performed within ten years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- Center for Climate and Energy Solutions' Building Envelope guide: http://www.c2es.org/technology/factsheet/BuildingEnvelope
- LEED for New Construction and Major Renovations: http://www.usgbc.org/leed/rating-systems/new-construction

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.7 ADOPT A GREEN BUILDING STANDARD FOR LOCAL GOVERNMENT BUILDINGS AND FACILITIES

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

Numerous local governments throughout the country have adopted green building standards for new construction of local government buildings. The construction of new buildings presents a significant opportunity to design with energy efficiency and resource conservation in mind. Adopting a green building standard for new construction will make green design consistent among all newly constructed buildings, reduce the local government's environmental impact, and demonstrate leadership by example to the rest of the community. This action is also in line with the New York State Green Building Construction Act passed in 2009 requiring all new state buildings meet green building standards. While not all local governments are constructing new buildings, all have existing properties. Green building standards can also be established for the operation and maintenance or retrofit of existing facilities. Significant energy savings and associated GHG emissions reductions can come from improvements to existing buildings.

B. How to implement this action

New Construction

Green building standards such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) or Green Globes are now used widely to provide guidelines for the design of new buildings. The local government should adopt a clear policy that requires new

construction be designed to a set of specific criteria or a green performance threshold. The local government may choose to reference existing standards such as LEED, Energy Star, ICC-IGCC 2012 or ASHRAE Standard 189.1 or may choose to establish its own standards, but those standards should go substantially beyond minimum code requirements. If referencing an existing standard such as LEED, it is important to note that it is not necessary to require buildings to be officially certified, as that is often cost prohibitive. Instead, the policy can reference that the guidelines be met and that official certification by a third party is optional. NYSERDA's New Construction Program may be able to help offset the cost of incorporating energy efficiency measures into new buildings and achieving LEED certification.

Existing Buildings and Facilities

For existing buildings and facilities, local governments should adopt a clear policy that requires one or more of the following:

- Proactively upgrade existing buildings to a specific set of green building standards by a certain date
- Incorporation of green building standards when facilities are to be upgraded
- Apply green building standards to existing operation and maintenance programs

As with new construction, the local government can reference existing green building design guidelines such as LEED for Existing Buildings or LEED Operations and Maintenance, or may establish its own standards. If referencing an existing standard, it is not necessary to require buildings to be certified under the referenced program, as costs for certification can be cost prohibitive. Policies can instead require that buildings be certifiable under the guidelines. It is recommended that the adopted standards or policy specify the size and age of buildings to which the standards would be applicable.

C. Time frame, project costs, and resource needs

Adoption of the policy itself can be completed in the standard time for the local government to adopt any internal policy. Staff resources required to fulfill this task will depend on in-house expertise. Consultants could assist as needed. Implementation of the existing buildings policy will require significant staff time and resources to evaluate all existing buildings and implement improvements wherever necessary to meet the adopted standards.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. The policy would likely be developed in coordination with numerous staff involved with capital planning, facilities management, and construction of new government buildings and would require approval and official adoption by the local government's highest ranking official(s).

E. How to obtain points for this action

Points can be obtained for this action by adopting a green building standard for new and existing local government buildings and facilities.

	Possible Points
1) Adopt green building policy for new construction	2
2) Adopt green building policy for existing buildings	2

F. What to submit

Documentation of the written policy as well as signed documentation of its adoption and enactment by the government official or body authorized to enact such policies. Additionally, local governments should submit a memorandum outlining how the policy has incorporated an existing green building standard directly or incorporated aspects of the standard into the policy. The policy may have been adopted at any time prior to the application date to receive points for this action.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- Nassau County, N.Y. Policy: http://www.nassaucountyny.gov/agencies/Legis/LD/07/NewsRelease/2007/072607greenbuildingsJT.html
- Syracuse, N.Y. Green Building Ordinance: https://www.usgbc.org/ShowFile.aspx?DocumentID=4041
- Additional examples from New York and throughout the country: http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1852
- NYSERDA New Construction Program: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/New-Construction-Program.aspx
- LEED Green Building Standard: http://www.usgbc.org/leed
- Energy Star: https://www.energystar.gov/
- ASHRAE Standard 189.1 for the Design of High-Performance, Green Buildings: https://www.ashrae.org/
- 2012 International Green Construction Code: http://www.iccsafe.org/cs/IGCC/Pages/default.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.8 BUILD A NEW GREEN BUILDING

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 10

A. Why is this action important?

While the greenest buildings are considered to be existing buildings, local governments often must develop a building if they cannot meet local needs with existing facilities. Building a resource efficient green building provides local governments with the opportunity to lead by example and make long-term investments that will reduce energy use and operating costs of the building. Local governments should also make sure to apply smart growth principles in selection of a site or location for the building, and possibly use the development as an opportunity to promote development in a redevelopment area. Local governments may also seek to certify their building using LEED or Energy Star, to gain additional recognition.

B. How to implement this action

Local governments should first determine if it is necessary to build a new building or if existing facilities can be used to meet the needs of the government and community. If it is determined that a new building is needed, then local governments should follow the established green building policy for new construction. If a policy does not exist, local governments must work with their architects and engineers to design an energy-efficient, green building. Local governments can use a green building standard, such as LEED, Energy Star, ICC-IGCC 2012 or ASHRAE 189.1 as a reference in the design process.

Local governments must consider the following factors when designing the building:

- Site sustainability
- Indoor air quality
- Energy efficiency
- Transportation and public transit options
- Water use efficiency
- Material selection and use
- Operation and maintenance plans
- Occupant comfort
- Monetary value

C. Time frame, project costs, and resource needs

Building a green building may slightly increase the overall timeline for building a new facility to allow for additional analysis and design of the green building features. The additional incremental costs of the green building features will typically pay for themselves after a period of time through energy savings, but the payback periods can vary greatly depending on the type of energy efficiency improvement. Local governments must involve relevant staff, the community, and work with a qualified architect and engineer to design and develop the building. Additional costs would be incurred if the local government seeks to attain a green building certification.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that has built a new facility in recent years. The department of public works or facilities will typically have responsibility for this action; however, the department(s) that will use the building will also be involved in the development process.

E. How to obtain points for this action

Local governments can earn points for this action by demonstrating they have designed and built a building following a green building standard. Additional points are awarded for attaining a green building certification.

	Possible Points
• Design and build a new facility that meets a green building standard	7
• Obtain a green building certification	3

F. What to submit

Local governments should submit documentation demonstrating how the building was designed and built to a green building standard. The project must have been completed within ten years prior to the application date. To receive full points for this action, local governments must submit documentation to demonstrate that the building has received a green building certification.

G. Links to additional resources or best practices

- CSC, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- LEED Rating Systems: http://www.usgbc.org/leed/rating-systems
- NYSERDA New Construction Program: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/New-Construction-Program.aspx
- Design to Achieve Energy Star: http://www.energystar.gov/index.cfm?c=cbd_guidebook.cbd_guidebook
- ASHRAE 189.1 Standard for the Design of High Performance, Green Buildings: https://www.ashrae.org/resources--publications/bookstore/standard-189-1
- 2012 International Green Construction Code: http://www.iccsafe.org/cs/IGCC/Pages/default.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements. The building must have been built within ten years prior to the recertification application date to be eligible for points.

3.9 UPGRADE WATER OR WASTEWATER TREATMENT FACILITIES AND INFRASTRUCTURE

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 7

A. Why is this action important?

Water and wastewater treatment plants can be a significant source of energy use and GHG emissions for local governments that own and operate these facilities. Energy use by water and

wastewater utilities is typically 20 to 40 percent of the energy consumed by a local government. A range of options is available for improving efficiency and reducing GHG emissions such as upgrading pumps and motors or capturing methane with an anaerobic digester. Water and wastewater utilities also provide opportunities for the installation of renewable energy and combined heat and power projects. Upgrades to water or wastewater infrastructure that feeds into and out of the treatment plants can also reduce GHG emissions associated with the water treatment. Minimizing losses in water distribution requires less water to be treated, which reduces total GHG emissions and saves energy and money.

B. How to implement this action

Points are obtained for this action by upgrading water or wastewater treatment facilities or infrastructure. Best practices include the following:

- Assessing facility energy use
- Installing variable frequency drives (VFD) for motors and pumps
- Using efficient drying technologies
- Optimizing anaerobic digester performance
- Using biogas to produce heat or energy
- Implementing renewable energy options such as wind solar or hydro-power
- Reducing leaks in water distribution systems

C. Time frame, project costs, and resource needs

Often local governments have extensive in-house experience for managing water and wastewater treatment facilities. Some upgrades could possibly be implemented by in-house staff. However, particularly for older facilities in need of numerous upgrades, it may be beneficial to hire a specialized auditor to inspect the facility and identify the most appropriate technologies and opportunities for the facility available now. Similar to the energy audits described in Action 3.1, there are several levels of audits that can be conducted for such facilities, and the cost increases as more detailed evaluation and analysis of the facility are conducted. However, the savings potential from upgrades to these facilities justifies the investment in both the audit and the efficiency improvements. NYSERDA also offers a water and wastewater facilities program that can provide useful support to the local government for this action.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates water or wastewater treatment facilities and equipment. The local government's water or public works department or the department that manages these facilities would be primarily responsible for this action.

E. How to obtain points for this action

Points are earned for this action based on the GHG emissions reduced through the upgrades:

	Possible Points
• Reduce GHG emissions by 5%	1
• Reduce GHG emissions by 10%	2
• Reduce GHG emissions by 20%	3

- Reduce GHG emissions by 40% 4
- Reduce GHG emissions by 50% 5
- Reduce GHG emissions by 60% 6
- Reduce GHG emissions by 75% or more 7

F. What to submit

Provide documentation of specific equipment or infrastructure upgrades, including details on new and replaced equipment and estimated energy savings and GHG reductions. The upgrade must have been performed within ten years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html
- NYSERDA, Water & Wastewater Energy Management–Best Practices Handbook: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Municipal-Water-and-Wastewater-Facilities/MWWT-Tools-and-Materials.aspx
- NYSERDA, Municipal Water and Waste Water Treatment Facilities: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Municipal-Water-and-Wastewater-Facilities.aspx
- American Council for an Energy-Efficient Economy, Local Policy Toolkit, Local Government Lead by Example, Water and Wastewater Treatment: http://aceee.org/sector/local-policy/toolkit/water
- U.S. EPA, Evaluation of Energy Conservation Measures for Wastewater treatment Facilities: http://water.epa.gov/scitech/wastetech/upload/Evaluation-of-Energy-Conservation-Measures-for-Wastewater-Treatment-Facilities.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Fleet and Vehicle Fuel

3.10 ADOPT A VEHICLE FLEET EFFICIENCY POLICY

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Currently active
Total Possible **points**: 3

A. Why is this action important?

To establish the political support and funding for implementation, local governments should develop and adopt a vehicle fleet efficiency policy. This provides vehicle fleet managers with the guidelines and requirements to improve the fuel efficiency, and ultimately reduce fuel costs and

GHG emissions. Local governments are encouraged to adopt a policy which requires the purchase and use of fuel efficient vehicles whenever they are commercially available and practicable.

B. How to implement this action

Local governments can develop a vehicle fleet efficiency policy by following the guidelines below:

- Complete a fleet vehicle inventory
- Establish definitions and minimum efficiency levels, and any exemptions, for different vehicle types.
- Include in the policy a plan and schedule for replacing vehicles with fuel efficient and/or alternative fuel options
- Reference http://www.fueleconomy.gov/ for information on fuel efficiency of vehicles
- Refer to New York State policies on vehicle fleet efficiency[3] and other best practices
- Include in the policy requirements for tracking mileage and fuel consumption
- Include in the policy requirements for annual review of the replacement schedule to adjust for new, more efficient, vehicle availability

As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Time frame, project costs, and resource needs

Developing a vehicle fleet efficiency policy can take approximately two to four months to draft, finalize, and adopt; however, this timeline depends on the political support for such a policy. The costs for developing the policy are primarily staff time.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and manages a fleet of vehicles. The department with responsibility for managing the local government's vehicle fleet, typically within the public works department, often in collaboration with the chief elected official's office, would be responsible for drafting this policy.

E. How to obtain points for this action

To earn points for this action, local governments must adopt a fleet vehicle efficiency policy and vehicle replacement plan. An alternative to an independent fleet vehicle efficiency policy would be incorporation of vehicle efficiency into a larger environmentally preferable purchasing policy. The policy must clearly define fuel efficiency standards for the entire fleet and for specific vehicle types, and a replacement policy or schedule for existing vehicles. To receive full credit for this action, the policy must include the following:

[3] New York State Executive Order 111, Directing State Agencies to be More Energy Efficient and Environmentally Aware, "Green and Clean State Buildings and Vehicles" calls for all New York State agencies to purchase alternative fueled vehicles for 50% of new light duty vehicles by 2005 and 100% of all new light-duty vehicles by 2010.

	Possible Points
• Specify the purchase of a minimum percentage of fuel-efficient vehicles by a short-term deadline, or minimum fuel-efficiency standards by a short-term deadline	2
• Require the purchase of 100% of fuel-efficient vehicles by a certain year	1

F. What to submit

Provide a written policy as well as signed documentation of its adoption and enactment by the local government official or body authorized to enact such policies. Additional recommended documentation includes an inventory of existing local government vehicles with a replacement schedule. The policy may have been adopted at any time prior to the application date and the local government must be actively implementing it.

G. Links to additional resources or examples

- Climate Smart Communities, Reduce Municipal Energy Use for Transportation: http://www.dec.ny.gov/energy/56925.html
- New York State Alternative Fuel Vehicles policies: http://www.afdc.energy.gov/pdfs/37144.pdf
- Massachusetts Green Communities Green Fleet Example Policy: http://www.mass.gov/eea/docs/doer/green-communities/grant-program/gc-criterion4-guidance.pdf
- Energy Aware Planning Guide: Local Government Fleet Efficiency http://www.mass.gov/eea/docs/doer/green-communities/eap/municipal-fleet-efficiency.pdf
- City of White Plains Vehicle Fleet Policies and Programs: http://www.cityofwhiteplains.com/green/city/city8.html
- NYSERDA's Transportation Programs: http://www.nyserda.ny.gov/Energy-Innovation-and-Business-Development/Research-and-Development/Transportation.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.11 RIGHT-SIZE THE LOCAL GOVERNMENT FLEET

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 3

A. Why is this action important?

Local governments often have more vehicles than needed in their local government fleets, and larger vehicles are often used for tasks that could be accomplished with smaller, more fuel-efficient vehicles. Local governments are encouraged to monitor their vehicle fleet composition and usage,

and identify opportunities to reduce fuel usage by matching the right vehicle with the right task and reducing the overall number of vehicles, if possible. Using vehicles appropriate for their tasks maximizes the fuel efficiency of the overall fleet. Reducing the size of the fleet decreases overall maintenance and insurance costs.

B. How to implement this action

Right sizing the local government fleet involves reducing the total number of vehicles and optimizing the usage of existing vehicles to ensure the most efficient vehicles are used as much as possible. Local governments can follow the guidelines below to implement this action.

Fleet Inventory

- Obtain a fleet management information system that tracks the type of usage, fuel usage, and fuel efficiency of each vehicle in the system.
- Identify vehicles that are underutilized and can either be retired or better utilized.
- Identify vehicles that are not suited to the tasks for which they are typically used.

Optimize Fleet Assignments

- Reassign vehicles to make sure the appropriate vehicles are used for the right tasks.
- Develop processes and procedures to enforce vehicle usage policies.
- Encourage car-pooling and more efficient route planning.

Reduce Fleet Size

- Retire or sell older or infrequently used vehicles.

C. Time frame, project costs, and resource needs

Right sizing the local government fleet can take about three to six months, although it depends on the quality of the information in the fleet management system. With a robust management system in place, right-sizing of the fleet should be an ongoing process. The costs associated with fleet right-sizing primarily involve staff time, as the focus of the effort is on using resources more efficiently.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and manages a fleet of vehicles. The department with responsibility for managing the local government's vehicle fleet, typically within the public works department, would be responsible for tracking fleet composition, vehicle miles traveled and fuel consumption.

E. How to obtain points for this action

Local governments can earn points for this action by assessing their vehicle fleet usage and needs, reassigning vehicles, and reducing the total size of the government's fleet.

	Possible Points
• Reduce vehicle fleet size by 10-25%	1
• Reduce vehicle fleet size by 26-50%	2

- Reduce vehicle fleet size by >50% 3

Local governments that have not reduced the total size of their fleets but have demonstrably reduced vehicle miles travelled and/or fuel consumption through a right-sizing or optimization program may submit documentation for consideration for points for this credit.

F. What to submit

Submit documentation outlining the steps taken to reassign and better utilize the fleet and to reduce the total number vehicles. The right-sizing should be completed within five years prior to the application date.

G. Links to additional resources or examples

- Climate Smart Communities, Reduce Municipal Energy Use for Transportation: http://www.dec.ny.gov/energy/56925.html
- U.S. Department of Energy Alternative Fuels Data Center, *Rightsizing Your Fleet to Conserve Fuel* guide: http://www.afdc.energy.gov/conserve/rightsizing.html
- *11 Approaches to Right-Sizing Your Fleet*: http://www.government-fleet.com/article/print/story/2009/11/11-approaches-to-right-sizing-your-fleet.aspx
- City of White Plains, Fleet Size Management: http://www.cityofwhiteplains.com/green/city/city8.html
- NYSERDA's Transportation Programs: http://www.nyserda.ny.gov/Energy-Innovation-and-Business-Development/Research-and-Development/Transportation.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.12 REPLACE TRADITIONAL VEHICLES WITH ADVANCED VEHICLES

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 5

A. Why is this action important?

Advanced vehicles are more fuel-efficient and produce less GHG emissions then their traditional counterparts. Advanced vehicles include hybrids, plug-in hybrids, electric vehicles, flex-fuel vehicles, alternative fuel vehicles, diesels, and fuel cell vehicles. Usage of these vehicles can help support the local and national market for advanced vehicles, along with the market for alternative fuels. In addition, these vehicles can help raise awareness of the local government's commitment to fuel efficiency as the vehicles are used and seen in the community.

B. How to implement this action

Local governments can implement this action by following the guidelines below.

- Develop vehicle replacement guidelines or policies to require the purchase of advanced vehicles
- Use established minimum fuel efficiency requirements for the types of vehicles in the fleet, as developed in Action 3.10 (if completed)
- Select advanced vehicles for purchase that suit local needs, available fuels, and local vehicle availability
- Consider a bulk purchase of vehicles to receive a better price, or organize a joint procurement with other neighboring jurisdictions, to maximize your buying power
- Replace vehicles as they near the end of their useful life with advanced vehicles, and/or replace the least fuel efficient vehicles prior to their end of life

C. Time frame, project costs, and resource needs

Establishing a program and guidelines to purchase advanced vehicles can take about four to six months, although this depends on the political support for such a program. The initial effort involves developing procurement guidelines and can typically be performed by local government staff. The additional cost of advanced vehicles compared to traditional varies, depending on the type of advanced vehicle. The U.S. DOE Vehicle Cost Calculator helps you compare the total cost of ownership for different vehicle makes and models: http://www.afdc.energy.gov/calc/

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and manages a fleet of vehicles. The department with responsibility for managing the local government's vehicle fleet, typically within the public works department, would be responsible implementing this action.

E. How to obtain points for this action

Local governments can earn points for this action by increasing the number of alternative fuel vehicles in their fleets.

	Possible Points
• 10-25% of fleet is advanced vehicles	2
• 25-50% of fleet is advanced vehicles	3
• 50-75% of fleet is advanced vehicles	4
• 75-100% of fleet is advanced vehicles	5

F. What to submit

Local governments should submit documentation, such as a report from the vehicle management system, illustrating the proportion of vehicles in the fleet that are fuel efficient advanced vehicles. The advanced vehicles must have been purchased within five years prior to the application date.

G. Links to Additional Resources or Best Practices

- U.S. Department of Energy fuel economy website: http://www.fueleconomy.gov

- U.S. Department of Energy Alternative Fuels Data Center, New York Laws and Incentives: http://www.afdc.energy.gov/laws/laws/NY
- EPA Green Fleet Guide: http://ofmpub.epa.gov/greenvehicles/Index.do;jsessionid=rFtnPgyHLjjtpwydQ9sMZmmm5v5jJYdP9rLTdDqvh2Yq1MQQj6wM!788633877
- NYSERDA's Transportation Programs: http://www.nyserda.ny.gov/Energy-Innovation-and-Business-Development/Research-and-Development/Transportation.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.13 ADOPT AN ANTI-IDLING POLICY FOR GOVERNMENT VEHICLES

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

The cost of fuel and vehicle maintenance as well as air pollution and GHG emissions associated with idling are significant. Trucks that idle for about eight hours per day for about 250-300 days increase the cost of annual fuel use by $6,000. (A SmartWay Technology Program, 2013). Adopting and enforcing an anti-idling policy will save local governments money and reduce air pollution. New York State has adopted a heavy duty vehicle idling law (Title 6 NYCRR, Subpart 217-3) of five minutes of idling, but local governments may wish to adopt policies that exceed the requirements of this law for government-owned vehicles and other types of vehicles.

B. How to implement this action

Local governments can reduce air pollution, GHG emissions, and fuel use by adopting an anti-idling policy for government vehicles, following the guidance provided below.

Develop the Policy:

- Assess federal, state, regional, and neighboring anti-idling regulations, for best practices to incorporate into local regulations.
- Draft an anti-idling policy and circulate it to all relevant government departments that utilize vehicles.
- Ensure that the policy does not affect critical operational needs, such as emergency vehicles.
- Review operational guidelines with departments that are unable to comply with the policy and determine if any adjustments to standard operations are feasible.
- Incorporate feedback from government staff members into a final draft policy to be presented to the elected body.

Implement the Policy:

- Educate elected officials, local government staff, and the public on the elements of the anti-idling policy, and time frame for implementation.
- Develop an approach for enforcing the policy.

C. Time frame, project costs, and resource needs

Adopting an anti-idling policy costs no money other than staff time to draft the policy and creating educational materials for local government staff. There is a large collection of sample anti-idling policies from which local governments can draw. The time frame for developing and adopting the policy depends on the political and internal support for such a policy and could take approximately two to five months to finalize and adopt.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and manages a fleet of vehicles. The chief elected official's office, public works or planning departments will likely draft the policy and, if necessary, present it to the legislative body for approval. In many cases, however, the chief elected official would have the authority to implement such a policy for the executive agencies on his own authority. The department responsible for managing the vehicle fleet would be responsible for enforcing and tracking compliance with this policy.

E. How to obtain points for this action

Local governments can earn points for this action by adopting an anti-idling policy for government-owned vehicles.

F. What to submit

Submit the anti-idling policy signed and dated by the chief elected official and, if necessary, approved by the legislative body, along with any communications, procedures manuals, or other documentation demonstrating that the policy has been implemented. The local government will be eligible to receive points regardless of when the policy was adopted, as long as it is in effect at the time of application.

G. Links to Additional Resources or Best Practices

- New York State Heavy Duty Vehicle Anti-Idling Law: http://www.dec.ny.gov/chemical/8585.html
- Climate Smart Communities, Transportation How-to for Municipalities: http://www.dec.ny.gov/energy/57108.html#establish
- Sample anti-idling policy: http://www.icleiusa.org/action-center/learn-from-others/2.5.%20Brattleboro%20Policy.pdf
- ATRI *Compendium of Idling Regulations*: http://www.atri-online.org/research/idling/ATRI_Idling_Compendium

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.14 IMPLEMENT A CAR-SHARING PROGRAM FOR LOCAL GOVERNMENT STAFF

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

Local governments can save money through reduced fleet size, fuel use, and fleet maintenance by registering to use car-share programs for local government staff. Using a car-share program can help to support new local car-share programs, promote alternative-fuel vehicles, and more efficiently use vehicles in existing car-share fleets.

B. How to implement this action

Local governments can implement car-sharing programs to replace or augment their existing fleets. A car-sharing program could be a more efficient approach to managing the local government's fleet entirely, or it could be a means of augmenting the existing fleet, particularly with advanced or alternative fuel vehicles. Local governments must first determine if a car-sharing program is suitable for their needs and then follow the guidelines below to implement the program.

- Develop objectives for car-sharing program: define the purpose of using a car-share program (e.g., to leverage existing infrastructure, incorporate more alternative fuel vehicles into the existing fleet, use vehicles more efficiently).
- Determine approach to deploying the program: collaborate with an existing local car-share provider or develop a new program.
- Select types of cars to be included in the program (alternative fuel vehicles only or all types of vehicles).
- Select locations for parking car-share vehicles.
- Develop system, or use an existing system, for managing reservations and usage of vehicles.
- Determine pricing and usage policies.
- Launch the program.

C. Time frame, project costs, and resource needs

The amount of time required to implement the action depends on the vehicle needs of the local government and the availability of a car sharing program in the area. If the car sharing program is intended to replace the existing vehicle fleet, then local governments will need a plan to retire the existing vehicles and transition to the new car sharing vehicles. The costs associated with a car sharing program will be calculated based on the usage of the vehicles, and there will be no upfront purchase costs or maintenance costs.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns or manages a fleet of vehicles. The department with responsibility for managing the local government's vehicle fleet, typically within the public works department, would be responsible implementing this action.

E. How to obtain points for this action

Local governments can earn points for this action by demonstrating that they have implemented a government car-sharing program. The program can be a partnership with an existing car-share provider or a government-managed program, as long as the vehicles are used by government staff. Additional points can be earned by using alternative fuel vehicles in the car-sharing fleet.

	Possible Points
• Implement a car-sharing program for government usage	2
Performance bonus points:	
• 25-50% of car-sharing fleet is alternative fuel vehicles	1
• >50% of car-sharing fleet is alternative fuel vehicles	2

F. What to submit

Local governments should submit documentation, such as a website or program materials, demonstrating that the car-sharing program is actively in use. To earn the bonus points, local governments should submit documentation specifying the percentage of the fleet that is composed of alternative fuel vehicles.

G. Links to Additional Resources or Best Practices

- City of Berkeley: Incorporating Car-sharing into Municipal Policy: Fleets, Development Planning, Parking: http://www.mayorsinnovation.org/pdf/park_june05.pdf
- Houston Municipal Electric Vehicle Car-sharing Program: http://www.icleiusa.org/news/city-of-houston-to-launch-first-municipal-electric-vehicle-car-sharing-program
- City of Aspen Car To Go Carshare Program: http://www.aspenpitkin.com/Departments/Transportation/CAR-TO-GO-Carshare-Program/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Outdoor Lighting

3.15 CONVERT STREETLIGHTS TO LED

Action pathway phase: Implement

Eligibility timeline: Within 5 years prior to the application date
Total possible points: 5

A. Why is this action important?

Advanced streetlight technology such as LEDs can reduce streetlight energy use by as much as 70 percent. Efficient streetlights will save money and energy, also reducing the emissions associated with electricity consumption. Installation of efficient streetlights is also a visual demonstration of the local government's commitment to resource conservation that can be seen by the community it serves.

B. How to implement this action

The following guidelines provide an outline for the process of converting streetlights to LED.

Plan for Streetlight Retrofit

- Perform an outdoor lighting inventory, if one doesn't exist
- Define the scope and objectives of the project, in terms of the quantity of streetlights to be converted, and if other changes to local street lighting are necessary, such as increasing or reducing number of streetlights based on input from local residents and businesses
- Identify streetlights for conversion; focus on the most outdated fixtures
- Consider performing a pilot of the new technology first to confirm the technology and lighting output meet local needs
- Develop project plan and financing strategy

Identify Design Concerns and Constraints

- Determine if existing light fixtures can be retrofitted or if they must be replaced
- Select appropriate technology and understand maintenance impacts
- Ensure the new technology meets the minimum design standards, such as those from the DesignLights Consortium Qualified Products List
- Consider other design factors such as glare, light pollution, safety and security, and aesthetic requirements

Implement New Lighting Technology

- Convert streetlights to LEDs found on the DesignLights Consortium Qualified Products List
- Monitor and report on performance of the new fixtures
- Develop or update ongoing maintenance plans

C. Time frame, project costs, and resource needs

Many communities carry out LED streetlight conversion in phases, in part to test the performance of the technology used, and in part because of the upfront cost. For a local government that does not have money in its budget for such a capital investment, implementing a LED streetlight conversion in

a pilot neighborhood may prove more feasible at first. The local government may want to investigate whether grants are available for funding support. Incentives may also be available through the electric utility. The project costs will depend on the scope of the project, and will include costs for design, implementation, and materials. Smaller local governments will typically want to hire a contractor to perform the upgrade; larger local governments may have the needed expertise in house to perform the upgrade.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This is applicable to local governments that own and operate streetlights but is also applicable to local governments that lease or pay fees for utility-owned streetlights. Local governments that do not own their streetlights can receive points for this if they advocate and support their local utility in updating the streetlights. The department likely to be responsible for this would be a public works, transportation, or engineering department.

E. How to obtain points for this action

Local governments can earn points for this project by successfully converting streetlights to LEDs. Points are awarded based on the proportion of streetlights converted.

	Possible Points
• Upgrade 10-25% of streetlights to LED	2
• Upgrade 25-50% of streetlights to LED	3
• Upgrade 50-75% of streetlights to LED	4
• Upgrade 75-100% of streetlights to LED	5

Local governments that use streetlights listed on the DesignLights Consortium Qualified Products List, can earn one (1) additional performance bonus point for using the highest performing commercial LED products.

F. What to submit

Provide documentation on number of streetlights upgraded, including the proportion of upgraded streetlights to total streetlights. Submit specifications for the technology used and documentation demonstrating listing on the DesignLights Consortium Qualified Products List, and if possible, any rebates, incentives, cost information or estimated or actual savings. The streetlights must have been updated within five years prior to the application date, and be actively in use.

G. Links to additional resources or best practices

- DesignLights Consortium Qualified Products List: http://www.designlights.org/QPL
- NYSERDA How-To Guide to Effective Energy , Efficient Street Lighting for Municipal Elected/Appointed Officials: http://www.rpi.edu/dept/lrc/nystreet/how-to-officials.pdf (technology information is dated, but the process guidance is useful)
- Case Study: Lewiston, N.Y., Effective Energy Efficient Street Lighting Project: http://www.rpi.edu/dept/lrc/nystreet/lewiston.pdf

- Green Light: Sustainable Street Lighting for NYC: http://www.nyc.gov/html/dot/downloads/pdf/sustainablestreetlighting.pdf
- Efficiency Vermont: *Improving Efficiency in Municipal Street and Public Space Lighting*:
- http://www.efficiencyvermont.com/docs/for_my_business/lighting_programs/EVT_MunicipalStreetLightingGuide_Rev040111.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.16 CONVERT TRAFFIC SIGNALS TO LED

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 4

A. Why is this action important?

Converting incandescent traffic signal lamps to LEDs is an easy, immediate and cost-effective way to lower local government energy bills. LED traffic signal lamps use 80 to 90 percent less energy than incandescent lamps. Local governments can expect to save approximately $60-$130 in annual energy costs per signal head (red, yellow, green lamps) by switching to LEDs. Additionally, LED traffic signal lamps can reduce maintenance costs over incandescent technology by approximately 75 percent. The estimated simple payback on LED traffic signal conversions based on energy cost savings alone is as little as one year.

B. How to implement this action

Local governments can follow the guidelines below to identify opportunities to improve the efficiency of local traffic signals.

Plan for the Traffic Signal Retrofit

- Define the scope and objectives of the project, in terms of the number of traffic signals to be converted and the financing strategy. Focus on the most outdated signals first
- Consider performing a pilot of the new technology first, to confirm the selected technology meets local requirements
- Develop project plan and select a contractor to perform the conversion

Identify Design Problems and Constraints

- Determine if existing traffic signals can be retrofitted or if they must be replaced
- Select appropriate technology and understand maintenance impacts

Implement New Lighting Technology

- Convert traffic signals to LED

- Monitor and report on performance of the new signals
- Develop or update ongoing maintenance plans

C. Time frame, project costs, and resource needs

A traffic signal upgrade project can typically be completed within a year, although it depends on the number of signals to be converted. The project costs also depend on the number of signals; however, local governments can anticipate that the payback for the upgrade will be about one year. The project costs will include costs for design, implementation, and materials. Smaller local governments will typically want to hire a contractor to perform the upgrade; however, larger local governments may have the needed expertise in house to perform the upgrade. Grants or incentives may be available through the local utility.

The ongoing cost savings associated with LED traffic signals can be significant, approximately 80 to 90 percent savings over incandescent lights, along with the ongoing savings from reduced maintenance requirements.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Applicable to any local government that owns and operates traffic signals. This type of project is typically performed by the department of public works or transportation. For communities in which the traffic signals are managed by the county, local governments can earn points for this action if their county has converted the traffic signals to LED.

E. How to obtain points for this action

Local governments can earn points for this project by successfully converting traffic signals to LEDs. Points are awarded based on the number of traffic signals converted.

	Possible Points
• Upgrade 10-25% of traffic signals to LED	1
• Upgrade 26-50% of traffic signals to LED	2
• Upgrade 51-75% of traffic signals to LED	3
• Upgrade 76-100% of traffic signals to LED	4

F. What to submit

Provide documentation on number of traffic signals upgraded, including the proportion of total traffic signals upgraded to LEDs. Submit specifications for the technology used and, if possible, any information on cost, rebates, incentives and documented savings. The traffic signals must have been updated within ten years prior to the application date and be actively in use.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html

- NYSERDA LED Traffic Signal Life Cycle Cost Analyzer Tool: http://www.lrc.rpi.edu/programs/transportation/LED/xls/led-lcc.xls
- Westchester County, *Completing LED Traffic Signal Upgrades on a Tight Budget*: http://www.lrc.rpi.edu/programs/transportation/LED/pdf/westchester.pdf
- Rensselaer Polytechnic Institute Lighting Research Center, Traffic Signal Best Practices: http://www.lrc.rpi.edu/programs/transportation/led/nystrafficsignals.asp
- Rocky Mountain Institute Guide to Energy Efficient Traffic Signals and Street Lighting: http://www.hamiltoncountyohio.gov/climate/calculator/pdfs/StudyRockyMountainStreetLights.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.17 REDUCE NUMBER OF OUTDOOR LIGHTING FIXTURES

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 4

A. Why is this action important?

Local governments may have the opportunity to reduce outdoor lighting to conserve energy. This simple action involves either optimizing the lighting schedule and/or reducing the number of outdoor lighting fixtures in use, to easily reduce total energy use. However, local governments should ensure public safety is a top priority whenever any changes to lighting are considered and implemented.

B. How to implement this action

Local governments can implement this action by identifying opportunities to reduce the number of outdoor lighting fixtures or reduce the time in which the fixtures are in use. Outdoor lighting can be essential for safety and security, particularly in commercial or industrial areas; however, residents often prefer reduced outdoor lighting to decrease light pollution. The following steps outline the process for identifying opportunities to reduce outdoor lighting energy use.

1. Identify possible areas or fixtures to reduce outdoor lighting
    - Determine if the outdoor lighting schedule can be optimized, to reduce unnecessary outdoor lighting during daylight hours.
    - Identify any areas in which light pollution has been a concern. Review recent resident and business survey results to identify opportunities. If annual surveys do not include this, incorporate a question into the survey regarding lighting.
    - Review street lighting design specifications. If any minimum standards are exceeded in terms of lighting spacing or output, opportunities may exist to decommission fixtures.
2. Review any proposed changes with affected residents and/or businesses

- Gather input from residents and/or businesses to confirm that the proposed changes will not adversely affect business opportunities or a sense of safety and security

3. Implement proposed changes
   - Implemented reduced outdoor lighting plans, ensure that all minimum lighting specifications are met or exceeded
   - Monitor and report on energy savings
   - Monitor resident and business feedback to ensure changes have no negative impacts

C. Time frame, project costs, and resource needs

The time to implement this action depends on the scope of the effort and the available information to develop a plan, although this type of effort will typically take between two to four months to implement. The level of effort to reduce the lighting fixtures in use, the output of lighting fixtures, or the lighting schedule also depends on the systems and lighting technology. The costs will depend on whether the changes can be performed centrally, or if a technician must be deployed to the field to make the change to the fixture directly.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government, whether it operates its own streetlights or contracts them out to a local utility. The department of public works or transportation is most likely to lead this effort for local governments that manage their own lighting. The department responsible for managing the outdoor lighting contract and relationship will lead the effort for local governments whose outdoor lighting is provided by a local utility.

E. How to obtain points for this action

Local governments can earn points for this action by developing and implementing a strategy to reduce outdoor lighting energy use. The strategy should involve a review and identification of opportunities to reduce outdoor lighting, a review of minimum design standards, and feedback from affected residents or businesses.

	Possible Points
• Develop a strategy for reducing outdoor lighting use	1
• Implement outdoor lighting reduction strategy	3

F. What to submit

Local governments should submit a copy of their outdoor lighting reduction strategy (or similar engineering planning document) along with documentation of the number of fixtures reduced or modifications to the lighting schedule. The strategy must have been implemented within five years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Reduce Utility Bills for Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64089.html

- NYSERDA How-To Guide to Effective Energy , Efficient Street Lighting for Municipal; Elected/Appointed Officials: http://www.rpi.edu/dept/lrc/nystreet/how-to-officials.pdf (technology information is dated, but the process guidance is useful)

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.18 UPGRADE OUTDOOR LIGHTING (OTHER THAN STREETLIGHTS AND TRAFFIC SIGNALS) TO MORE EFFICIENT AND/OR SOLAR TECHNOLOGY

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 4

A. Why is this action important?

Outdoor lighting in public areas and parks may represent a smaller portion of total outdoor lighting energy use as compared to streetlights, but these fixtures are often the most costly to maintain, as they are more widely distributed and sometimes in inconvenient locations, requiring more time and effort for regular maintenance. Upgrading off-street outdoor lighting not only reduces energy consumption but also decreases long-term maintenance costs.

B. How to implement this action

Local governments can follow the guidelines below to plan for and upgrade off-street outdoor lighting.

Plan for the Lighting Upgrade

- Perform an outdoor lighting inventory, if one doesn't exist
- Define the scope and objectives of the project in terms of the number and location of fixtures to be updated and the financing strategy. Focus on the most outdated fixtures first. Possible locations can include parks, recreational areas, parking lots, and walkways
- Consider performing a pilot of the new technology first, to confirm the selected technology meets local requirements
- Develop a project plan and select a contractor to perform the upgrade

Identify Design Concerns and Constraints

- Determine if existing fixtures can be retrofitted or if they must be replaced
- Select appropriate technology and understand maintenance impacts
- Ensure new technology meets minimum design standards and is suitable for the location
- Ensure the new technology meets the minimum design standards, such as those from the DesignLights Consortium Qualified Products List

- Consider other design factors such as glare, light pollution, safety and security, maintenance, and aesthetic requirements

Implement New Lighting Technology

- Convert outdoor lights to LEDs found on the DesignLights Consortium Qualified Products List or solar powered lighting
- Update or convert off-street outdoor lighting fixtures
- Monitor and report on performance of the new fixtures
- Develop ongoing maintenance plan

C. Time frame, project costs, and resource needs

The costs associated with upgrading outdoor lighting depend on scope of the project, the selected technology and the number of fixtures to upgrade and will include costs for design, implementation, and materials. Solar LED lights have a longer payback period compared to traditional LED lights, but they could be a preferred solution for more remote locations that are not connected to the grid or inconvenient to maintain. Smaller local governments will typically want to hire a contractor to perform the upgrade; however, larger local governments may have the needed expertise in house to perform the upgrade.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates outdoor lighting in public places. The department likely to be responsible for this would be the public works, transportation, parks or engineering department.

E. How to obtain points for this action

Local governments can earn points for this action by upgrading outdoor lighting fixtures to energy efficient fixtures that meet the DesignLights Consortium specifications or to solar technology.

	Possible Points
• Upgrade 10-25% of light fixtures (other than streetlights and traffic signals)	1
• Upgrade 26-50% of light fixtures (other than streetlights and traffic signals)	2
• Upgrade 51-75% of light fixtures (other than streetlights and traffic signals)	3
• Upgrade 76-100% of light fixtures (other than streetlights and traffic signals)	4

F. What to submit

Provide documentation on the number and location of upgraded outdoor light fixtures, including the proportion of total outdoor lights upgraded. Submit specifications for the technology used and if possible, information on the cost, rebates, incentives, and any documented savings documented.

The outdoor lights must have been updated within five years prior to the application date, and be actively in use.

G. Links to additional resources or best practices

- Climate Smart Communities, Case Studies: Energy Efficient Municipal Facilities and Operations: http://www.dec.ny.gov/energy/64095.html
- DesignLights Consortium Qualified Products List: http://www.designlights.org/QPL
- Efficiency Vermont: Improving Efficiency in Municipal Street and Public Space Lighting: http://www.efficiencyvermont.com/docs/for_my_business/lighting_programs/EVT_MunicipalStreetLightingGuide_Rev040111.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Government Solid Waste

3.19 ADOPT A WASTE MANAGEMENT STRATEGY FOR GOVERNMENT HOSTED AND PERMITTED EVENTS

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Currently active
Total possible points: 2

A. Why is this action important?

Avoid the cost and environmental effects of hauling and processing waste produced at meetings and events by adopting an event waste management strategy. Not only will such a strategy decrease the amount of waste sent to a landfill or incinerator, it will be a demonstration to staff and the public of resource-efficient waste management.

B. How to implement this action

A waste management strategy outlines how to increase waste diversion, increase the use of products that can be reused and/or are made out of recyclable or compostable materials, and how to separate compost, recyclable materials, and non-recyclable materials. The policy should indicate product specifications for events and meetings, such as reusable, compostable, or recyclable packaging, plates, and cutlery; use of water pitchers and non-disposable glasses, etc., as well as the number and type of separate waste bins, signage to direct participants to properly dispose of their waste, and how the waste will be handled after the event. This strategy should cover government meetings, government hosted events, and events requiring a permit.

C. Time frame, project costs, and resource needs

When first implementing this action, staff time will be necessary for developing the strategy, identifying options for waste diversion, and identifying product options, cost, and availability. However, once the strategy is developed and has been implemented a few times, the process should become more streamlined and better integrated as standard procedure. Signage must also

be developed, requiring some minimal printing costs and staff time. There may be an increase in cost for events due to this strategy.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action can be implemented by any local government and would require coordination among public works, facilities, purchasing, and possibly parks and recreation staff.

E. How to obtain points for this action

Local governments can earn points for this action by adopting a policy or strategy for that will significantly reduce waste generated at government hosted and permitted events and demonstrating that the policy has been implemented.

	Possible Points
• Adopt waste management policy for government hosted events	1
• Demonstrate implementation	1

F. What to submit

Provide a copy of the written policy or strategy, documenting approval by the highest ranking official. This can be part of a broader waste management policy or plan. Photos or copies of signage or information materials provided and/or copies of any events where the strategy has been implemented should also be provided as applicable. The policy may have been adopted at any time prior to the application date and the local government must be actively implementing it to receive points.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- DEC, Green Meetings: http://www.dec.ny.gov/chemical/53418.html
- EPA Green Guide for Waste Management and Recycling During Special Events: http://www.epa.gov/wastes/conserve/tools/rogo/documents/parks.pdf
- NAPCOR A Comprehensive Guide to Venue and Event Recycling: http://www.napcor.com/pdf/SingleServeToolkit.pdf
- Northeast Recycling Council, Best Management Practice Guidebook for Special-Event Generated Waste in Rural Communities: http://www.nerc.org/documents/special_event_bmps_final.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.20 PROVIDE RECYCLING BINS NEXT TO TRASH RECEPTACLES IN LOCAL GOVERNMENT BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Evidence has shown that the easier it is for people to recycle the more likely they will do so. If an employee has to go out of his or her way to recycle an item, he or she is more likely to dispose of it in the trash receptacle than to go to another location to recycle it. Placing recycling bins next to all trash receptacles makes recycling easier and provides a visual reminder to recycle items when possible.

B. How to implement this action

This action is implemented by providing a recycling bin wherever there is a trash bin. This could be implemented in three areas:

- All common areas in local government buildings
- All local government-owned public property, such as parks and recreation areas
- At each employee's desk

It may be worth considering providing a recycling receptacle larger than the trash receptacle in settings where users are more likely to generate recyclable waste than trash. For example, some local governments have provided small trash cans that hook to the side of a larger recycling bin at employees' desks since the waste generated is often recyclable paper waste.

Local governments should also ensure that trash and recycling bins are clearly distinguishable, with different colors and signage.

C. Time frame, project costs, and resource needs

This action can be implemented in a short period of time. Costs and resources needed would include the purchase of recycling bins, minimal labor time to place them throughout local government buildings and spaces, signage for staff education, and some time for custodial staff to pick up and dispose of recyclables separately from the trash.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that has recycling service can implement this action. The types of recyclables collected will vary depending on the recycling services available in each community. This will most likely be implemented by a public works department and/or a facilities department.

E. How to obtain points for this action

Local governments can earn points for this action by providing recycling bins in the areas described in Section B. Local governments must have recycling bins in every location listed below where there is a trash can.

	Possible Points
• Recycling bins in common areas	1
• Recycling bins in public spaces	1
• Recycling bins at employee desks	1

F. What to submit

Documenting the implementation of this action will require a sample of photographs be taken showing that recycling bins have been placed appropriately next to all trash receptacles. Any other written documentation, such as policies, purchasing records, or recycling program descriptions should also be provided to demonstrate that the recycling bins are provided everywhere there is a trash bin. If waste diversion has been tracked, that data should be provided as well. The recycling bins must be actively in use to receive points for this action.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- DEC, An Office Waste Reduction, Reuse, Recycling, Composting, and Buy Recycled Resource Book: http://www.dec.ny.gov/docs/materials_minerals_pdf/businessrecyclepam.pdf
- NYS DEC Recycling: A Planning Guide for Communities: http://www.dec.ny.gov/docs/materials_minerals_pdf/lswmplanning.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.21 PROVIDE ORGANIC WASTE COLLECTION AND COMPOSTING IN LOCAL GOVERNMENT BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Organic waste, such as food waste, becomes a significant source of methane production when it makes its way into a landfill. It can also be a significant portion of waste hauled to the landfill. Diverting this portion of waste will reduce tipping fees for local governments and reduce their contribution to GHG emissions generated from waste.

B. How to implement this action

This action can be implemented through the following steps:

1. Identify locations throughout government buildings where organic waste is being generated; this is often in kitchen settings
2. Procure collection bins for placement in these locations

3. Identify a central location for collecting organic waste on government property, if not already sited, and transfer to a composting or anaerobic digestion facility.
4. Educate employees about what can be composted and how. Provide instructional signs, including pictures of acceptable and not acceptable items next to collection bins.
5. Train custodial and maintenance staff on proper handling of collection bins, frequency of removal, and composting procedures.
6. Follow the instructions for the appropriate method to compost the materials, depending on the type of composting approach used, such as a composting mound, bin, can, or tumbler. Use the NYS DEC guide to composting, *Everything You Have Always Wanted to Know About Home Composting, But Were Afraid to Ask*.
7. Compost soil can be used for government property landscaping or provided to the community

C. Time frame, project costs, and resource needs

Implementing this action will require strategic planning, procurement of collection bins and other materials, and proper education of staff. The education piece will likely be an ongoing effort for the first year or more until it becomes standard behavioral practice for employees.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. It will most likely be the responsibility of the facilities department in coordination with the waste or recycling division.

E. How to obtain points for this action

Local governments can earn points for this action by collecting compostable materials in government facilities. Local governments should provide the square footage of facilities with composting.

	Possible Points
• Organic waste collection in 10-25% of government facilities, by square footage	1
• Organic waste collection in 26-50% of government facilities, by square footage	2
• Organic waste collection in 51-100% of government facilities, by square footage	3

F. What to submit

Photos should be submitted documenting the current presence of organic waste collection in government facilities, along with information on the square footage of buildings with composting facilities or receptacles. Provide information on ultimate disposal of organic waste at a composting or anaerobic digestion facility. Educational materials and any communication to employees regarding composting should also be provided as well as information on what is done with the material after it leaves the buildings.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- DEC, Recycling: A Planning Guide for Communities: http://www.dec.ny.gov/docs/materials_minerals_pdf/lswmplanning.pdf
- DEC, An Office Waste Reduction, Reuse, Recycling, Composting, and Buy Recycled Resource Book: http://www.dec.ny.gov/docs/materials_minerals_pdf/businessrecyclepam.pdf
- DEC, Everything You Have Always Wanted to Know About Home Composting, But Were Afraid to Ask: http://www.dec.ny.gov/docs/materials_minerals_pdf/compost.pdf
- Stopwaste.org, How to Compost at Work: http://www.stopwaste.org/docs/compost_at_work.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.22 PROVIDE E-WASTE COLLECTION IN LOCAL GOVERNMENT BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Electronic waste (e-waste) can have particularly negative effects on the environment en route to and once disposed of in a landfill. Electronics, such as computers, appliances, batteries, phones, and other products contain chemicals and hazardous materials that should be handled separately from the rest of the waste stream and can often be recycled, but require specialized recycling processes. Similar to providing other recycling bins, providing e-waste collection will give staff and other building users a place to deposit e-waste and discourage them from disposing of it in the standard trash bins.

B. How to implement this action

Implement this action by providing e-waste collection in one or more highly visible locations throughout government buildings. Communication should be sent to employees about the availability of this collection, the location(s), and what types of materials can be placed in collection bins. Employees should be informed of what is done with the material post-collection and the importance of keeping electronic waste out of the trash being sent to landfills or incinerators.

C. Time frame, project costs, and resource needs

Recycling staff must determine the most appropriate way of storing and removing e-waste and must identify a location to which to haul it or someone to pick it up. There are an increasing number of private companies that can handle this waste, typically at no cost, but it will require some investigation and coordination on the part of government staff to identify the most appropriate option.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This can be implemented by any local government and will likely be the responsibility of a recycling coordinator or other waste management staff.

E. How to obtain points for this action

Local governments can earn points for this action by collecting e-waste in government facilities and providing information on the ultimate disposal of this waste.

	Possible Points
• Collect e-waste in 1 government facility	2
• Collect e-waste in more than 1 government facility	3

F. What to submit

Photos should be submitted documenting the presence of current e-waste collection in government facilities. Educational materials and any communication to employees regarding this collection should also be provided as well as information on where collected materials are taken.

G. Links to additional resources or best practices

- DEC, E-Waste Recycling: http://www.dec.ny.gov/chemical/65583.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.23 CONDUCT A LOCAL GOVERNMENT WASTE AUDIT AND TRACK DIVERSION RATE OVER TIME

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 2

A. Why is this action important?

As with energy and GHGs, we "can't manage what we don't measure." Assessing the amount and composition of the waste generated by local government operations is an essential step in establishing a baseline from which to measure waste diversion and reduction improvements over time.

B. How to implement this action

Local governments implement this action by planning for and conducting a waste assessment (audit). The EPA provides numerous resources, including how to plan for and carry out an audit, including checklists and other resources. The common approaches to a waste audit include the following:

- Examination of waste records
- Facility walk-throughs
- Waste sorts

There are benefits and drawbacks to each of these approaches and a combination of approaches would likely provide the most comprehensive and accurate assessment of the local government waste stream and provide the most information for how and where to implement new practices.

C. Time frame, project costs, and resource needs

Depending on the approach used to conduct the waste audit, costs and resource needs will vary for this action. A local government may choose to hire someone to conduct an audit, though it is more common for local governments with limited budgets to conduct an audit using in-house staff and resources and/or volunteers or interns. Aside from the time to conduct the audit itself, a designated staff person must take time to synthesize and analyze the results.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This is applicable to any local government. The effort would likely be led by the waste management or recycling division and/or other government facilities staff.

E. How to obtain points for this action

Points will be obtained for this action through completion of a waste audit in any of the forms described in Section B.

F. What to submit

Documentation of the methods used to complete the waste audit should be provided along with information about the date and location(s) of the audit. A document or report summarizing the results of the audit should also be provided. The audit must have been completed within five years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, How to: Climate Smart Waste Reduction and Materials Reuse: http://www.dec.ny.gov/energy/72962.html
- EPA, WasteWise Waste Assessment Approaches: http://www.epa.gov/smm/wastewise/approach.htm

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Financial and Policy Mechanisms

3.24 ADOPT AN ENVIRONMENTALLY PREFERABLE PURCHASING POLICY

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 4

A. Why is this action important?

A local government's commitment to climate action should extend to how it can influence climate action and efficiency outside its own operations. One important way to do this is through its purchasing. Demand for energy efficient and environmentally responsible products will improve market penetration. In addition, establishing an environmentally preferable purchasing (EPP) policy institutionalizes decisions on appliances, products, and materials.

B. How to implement this action

Environmentally preferable purchasing policies can be adopted in many forms that may include standards for some or all of the following:

- Energy efficient appliances
- Energy efficient IT equipment
- Efficient HVAC equipment
- Recycled material content
- Recyclable materials
- Forest stewardship
- Locally-produced goods
- Organic goods and foods

Because this pledge element aims to reduce energy demand in local government operations, the EPP adopted must, at a minimum, include standards for purchase of energy-efficient equipment, using standards such as Energy Star.

C. Time frame, project costs, and resource needs

This policy can be adopted in a short time. It will require coordination among various staff to determine policy scope, language, and specifications. It may require additional research to determine product specifications and identify model language, but this action is likely to require primarily administrative time and resources. Implementation of the policy may result in some cost premiums for products, though those premiums continue to diminish as demand has risen for energy efficient and environmentally preferable products.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action can be implemented by any local government. The procurement or purchasing officer or department will be primarily responsible but likely in consultation with facilities staff.

E. How to obtain points for this action

Local governments can earn points for this action by adopting a purchasing policy covering the environmental considerations outlined in Section B.

	Possible Points
• Energy efficiency standards included in policy	1
• Recycled materials standards included in policy	1
• Locally produced/organic goods standards included in policy	1
• Forest stewardship standards included in policy	1

F. What to submit

Submit documentation of the written policy as well as signed documentation of its adoption by the official or governing body authorized to enact such policies. Additionally, provide reference to and/or a copy of any definitions, specifications, and/or standards referenced in the adopted policy. The policy should have been adopted or updated within the past 5 years of the application date or include specifications that account for the availability of new, more efficient and/or more environmentally preferable products.

G. Links to additional resources or best practices

- Climate Smart Communities, Municipal Low-Energy Policies How-to: http://www.dec.ny.gov/energy/57119.html U.S. EPA, Local Government Climate and Energy Strategy Series- Energy Efficient Product Procurement: http://www.epa.gov/statelocalclimate/documents/pdf/energyefficientpurchasing.pdf
- Center for a New American Dream, Environmental Purchasing Policies: http://www.cec.org/files/pdf//NAGPI%20Policy%20Paper2e.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.25 ESTABLISH A FINANCING MECHANISM FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY PROJECTS IN GOVERNMENT-OWNED BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

The up-front cost for implementing energy efficiency improvements and renewable energy projects is often a deterrent to doing so. However, local governments are aware that energy savings will often pay back the up-front costs. Establishing a financing mechanism, such as a revolving energy fund, can provide that initial capital and uses the energy savings to replenish the fund, thus allowing for continuous energy improvements over time.

B. How to implement this action

Local governments can establish different types of financing strategies for energy efficiency and renewable energy projects. One approach is to dedicate a portion of the annual energy budget to energy efficiency upgrades or to use budget incentives to allow departments to keep the energy savings resulting from energy efficiency projects. Another approach is to require the audit and upgrade of buildings after a certain period of time, or when the upgrade has a payback period less than a certain number of years. A revolving energy fund is another financing mechanism that uses savings from energy efficiency or renewable energy projects to pay for future improvements.

Revolving energy funds can take two forms. They can be established strictly internally for local government improvement projects through which departments can access funds for energy improvements and replenish the fund with savings achieved. Funds can also be established by the local government to provide loans to the community, specifically to residents and businesses. While such community-scaled funds are encouraged and are the subject of action 8.12, this particular action should focus on providing a financing mechanism for local government projects as the goal of Pledge Element 3 is to decrease energy demand within local government operations.

C. Time frame, project costs, and resource needs

The initial setup of a revolving energy fund or other financing mechanism is the most challenging part. Finance managers and department heads must meet and come to an agreement about how best to set up the fund. Adoption of new budget policies may be required to allow for the fund to be established, since budgets operate in different ways and sometimes even operate differently among various departments, and also involve the use of taxpayer money,. In addition, the local government must identify seed money for the fund. ICLEI USA has developed some guidance for this: http://www.icleiusa.org/blog/identifying-seed-money-for-your-revolving-energy-fund

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. It will require buy-in from all departments and the highest ranking official(s) but will primarily be the responsibility of the finance or budget department.

E. How to obtain points for this action

Points will be awarded for establishing a financing mechanism for energy efficiency or renewable energy projects. The financing mechanism must be in active use for the CSC to receive points.

F. What to submit

Provide documentation of the establishment of this financing mechanism, source of the seed money, any policies that were adopted to establish the dedicated financing mechanism, and a list of projects, including cost details and estimated savings that have been funded through this mechanism. For a revolving energy fund, the terms and conditions for drawing from and replenishing the fund must be submitted, and it must be capitalized and operational for the CSC to receive points for this action.

G. Links to additional resources or best practices

- U.S. DOE Solution Center, State and Municipal Revolving Loan Funds: http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/revolvingloanfunds.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.26 INCORPORATE ENERGY EFFICIENCY AND WASTE HANDLING PROVISIONS IN STANDARD SPECIFICATIONS AND GOVERNMENT CONTRACTS

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Often products and procedures that affect a local government's energy use and waste stream are not the responsibility of the local government staff but are procured or handled by external entities through government contracts. For this reason, it is important that energy efficiency and waste handling provisions are incorporated into the standard specifications of those contracts.

B. How to implement this action

Energy efficiency standards and waste handling requirements should be adopted as standard specifications in government contracts. Types of specifications could include, but are not limited to, the following:

- Waste separation and recycling requirements for
    - Janitorial services
    - Construction and demolition
    - Events held on public property
- Energy efficiency and fuel efficiency standards for
    - Appliances and equipment used by contractors
    - Transit vehicles
    - Waste hauling vehicles
- Anti-idling policies for contractor vehicles

There are many more examples and local governments should consider the types of specifications that make sense for inclusion in their contracts, especially for those contracted goods and services that have significant effect on energy use and waste handling.

C. Time frame, project costs, and resource needs

These standard specifications can be developed over time and should be reviewed and adjusted on an ongoing basis as needed. Local government staff will benefit from investigating example specifications regarding energy efficiency and waste handling from other local governments' contracts, as provided below.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. This may include drafting of specifications by a variety of departments, but procurement staff will be primarily responsible for implementation of this action.

E. How to obtain points for this action

Local governments can earn points for this action by incorporating energy efficiency and waste handling specifications into government contracts.

	Possible Points
• Incorporate energy efficiency specifications into government contracts	2
• Incorporate waste handling specifications into government contracts	1

F. What to submit

Submit copies of all relevant specifications included in government contracts. The contracts must be active or executed within one year prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- U.S. EPA, Energy-Efficient Product Procurement: http://www.epa.gov/statelocalclimate/documents/pdf/energyefficientpurchasing.pdf
- Center for a New American Dream, Environmental Purchasing Policies: http://www.cec.org/files/pdf//NAGPI%20Policy%20Paper2e.pdf
- New York City Department of Design and Construction, Construction and Demolition Waste Manual: http://www.nyc.gov/html/ddc/downloads/pdf/waste.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.27 UTILIZE A GREEN OR SUSTAINABILITY RATING SYSTEM FOR INFRASTRUCTURE IMPROVEMENT PROJECTS

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 6

A. Why is this action important?

Within any given year, a number of capital improvement projects from new construction to maintenance of existing infrastructure are underway within local governments. These activities can be very large sources of GHG emissions and have broader impacts on air and water quality, while also representing an opportunity to make local infrastructure more resilient to climate change. Ensuring that these projects are following specific standards to minimize overall impacts and design for the changing climate is important. A green or sustainability rating system or certification program can help guide the project to a more sustainable outcome.

B. How to implement this action

This action can be implemented by using an existing project or sector-based sustainability rating system or by using a newly created, unique sustainability standard for projects. A number of rating systems and certification programs are focused on infrastructure over which local governments often have control. The steps to implement this action include the following:

1. Identify and select an applicable rating system based on the sector that the project addresses, e.g., roads, sites, highways
2. Select appropriately qualified staff or consultants to determine that the project is following the rating system guidelines
3. Apply the rating system to the project as early as possible, ideally from the design phase
4. Certify the project (optional)

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs vary greatly depending on whether an existing system is used or a new one created and whether or not third-party certification is sought. Overall, the time also depends on the project type and schedule. Project costs will include staff time and possibly consultant time, as well as certification costs.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action. Typically, the departments of public works, transportation, planning, or the environment would oversee an action like this.

E. How to obtain points for this action

Points are obtained for this action by completing a project using a recognized sustainability rating system. If creating a unique rating system, the rating system will have to be submitted for approval prior to application of points for this action.

	Possible Points
• Utilize a recognized and approved sustainability rating system on one project in three years	2
• Utilize a recognized and approved sustainability rating system on 2 to 4 projects in three years	4

- Utilize a recognized and approved sustainability rating system on 5 or more projects over the course of three years — 6

Performance Bonus Points:

- Seek and achieve certification from a rating system (ranges depending on level achieved) — 1-4

F. What to submit

The local government must provide the documentation associated with the certification program used, including completed checklists, reports, photos, etc. The project must have been completed within five years prior to the application date.

G. Links to Additional Resources or Best Practices

- DOT, GreenLITES: https://www.dot.ny.gov/programs/greenlites
- Institute for Sustainable Infrastructure, Envision™ Rating System: www.sustainableinfrastructure.org
- Green Roads: https://www.greenroads.org/
- Invest: https://www.sustainablehighways.org/
- Sustainable Sites: http://www.sustainablesites.org/
- LEED for Neighborhood Development: http://www.usgbc.org/neighborhoods

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Employee/Staff Behavior

3.28 SUBSIDIZE AND INCENTIVIZE EMPLOYEE ALTERNATIVE COMMUTE

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

The transportation sector is consistently one of, if not the largest, contributor to GHG emissions on the community scale. Local governments can lead by example and encourage resource-efficient behavior among their employees by providing incentives for them to use alternative forms of transportation.

B. How to implement this action

Contribute to reducing air pollution, GHG emissions, and traffic in the community by subsidizing or incentivizing employees to make non-single occupancy vehicle commutes. Incentives may include establishing transportation reimbursement accounts whereby employees determine their contribution of pre-tax salary for mass transit fares and passes, car and vanpools, and parking (e.g., park and ride), to encourage and reduce the employee's costs of alternative commutes. Other incentives may include cash gifts for those who rideshare, free or discounted public transit passes, or parking discounts or preferential parking for carpoolers and vanpoolers. Establish a formal policy with the human resources office regarding how the program shall be administered and used, create a registration process and monitoring system, and tailor benefits to the needs and circumstances of employees (e.g., rideshare will likely be more useful to employees who live in a rural part of a community, while bus passes will likely be more useful to an employee who lives in a more developed part of a community).

C. Time frame, project costs, and resource needs

Establishing a commuter incentive program will require time and effort on the part of human resources and payroll, but there are numerous programs already established throughout the country on which a local government can model its program. A local government may also wish to pursue contracting with a third-party entity, such as WageWorks (https://www.wageworks.com/Home.aspx) that can help administer the benefit through the payroll system.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government could establish a commuter incentive program, though it will be most beneficial in communities with more alternative commuting options, such as public transit, bike paths, and existing ride-share programs. Human resources and payroll staff will be instrumental in implementing this action.

E. How to obtain points for this action

Local governments can earn points for this action by subsidizing or incentivizing employee alternative commutes.

	Possible Points
• Establish preferred parking for carpools and vanpools or a system for organizing ride-sharing	1
• Provide subsidized or pre-tax transit pass incentives	2

F. What to submit

The local government must provide documentation of the incentive program provided to employees, including level and type of incentives, and evidence that the program is communicated to new and current employees. If the program has been in place for 6 months or more, the number of employees enrolled in the program should be provided. The program must be currently active to receive points for this action.

G. Links to Additional Resources or Best Practices

- DOT, Employer Sponsored Commuter Incentive Information: http://www.511ny.org/employers.aspx#regional
- New York City Transit Benefit Program through WageWorks: http://www.nyc.gov/html/opa/html/transportation_benefits/tranportation_benefits.shtml

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.29 ENGAGE EMPLOYEES THROUGH A GREEN PLEDGE OR COMPETITION

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 2

A. Why is this action important?

One of the best ways to ensure local government operations are as resource efficient as possible is to engage employees in the green commitments of the local government. In addition to making internal operations more efficient, reducing energy use and waste, engaging employees at work also encourages them to adopt green behaviors at home and in the broader community, thus the employees are demonstrating local government leadership by example.

B. How to implement this action

Green teams and green pledges among government and company employees have become a very popular strategies in recent years, so there are numerous case studies and examples of how this has been done elsewhere. There are several ways that such programs are implemented:

- Establish green champions or ambassadors in each department to participate in this effort. The green champions will typically be members of the existing green team (see Action 1.4), or they could be other staff members appointed to participate in this effort.
- The green team will identify opportunities for improved efficiency, waste reduction, or water reduction and educate colleagues on ways to take action and the green champions (if different from the green team) will develop effective approaches for communicating this information.
- Employees are encouraged to sign a “green pledge” in which they pledge to take certain green actions. Prizes or recognition for completing the pledge actions can be provided.
- A competition can be established among employees or between departments for environmental performance, such as energy reductions, water savings, alternative commuting, or waste diversion. Competition is often a motivating factor for employees.

Whatever format the program takes it is important to recognize employees for their actions. Incentives, such as prizes or leadership awards will have a significant impact in motivating staff. Improvements should be measured and reported to employees so they can see the effect their actions have had.

C. Time frame, project costs, and resource needs

This action can be implemented at any time. It requires time and effort on the part of those employees leading the effort. If incentives are offered, additional financial resources will be required or staff time to secure donations from local sponsors. Marketing materials may also be needed to promote events or educate employees on certain initiatives.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government and should involve representatives from all departments.

E. How to obtain points for this action

Local governments can earn points for this action by establishing and maintaining a green team with green ambassadors or a green employee engagement program. Regular meetings of the green team should take place and a minimum of two challenges, events, and/or green educational campaigns should be carried out each year.

F. What to submit

Information to provide for this action will vary depending on the program. Documentation could include a list of green team members and representative departments; meeting agendas; topics, tips, or campaigns pursued; marketing and promotional materials distributed; results of pledges or challenges; numbers of participants in challenges; and when available, impacts of the program, such as energy savings, or waste reduction and diversion. To earn points, the team and/or program must have been active within one year prior to the application date.

G. Links to Additional Resources or Best Practices

- City of Cambridge, MA, GreenSense program: http://www.cambridgema.gov/theworks/greenliving/cambridgegreensense.aspx
- Town of North Castle, N.Y. Green Team: http://cleanair-coolplanet.org/north-castle-ny-forms-a-municipal-green-team/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.30 INCORPORATE GREEN PRINCIPLES, COMMITMENTS OR REQUIREMENTS INTO STAFF TRAINING

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Incorporating green principles and requirements into employee training ensures that the local government's commitment to resource conservation and efficiency is made clear to every employee within the organization and helps to ensure that policies are not only adopted but implemented.

B. How to implement this action

This action should be implemented through the following steps:

1. Compile all internal policies, requirements, and guiding principles relevant to resource conservation and efficiency into one guiding document
2. Ensure that the green policies document is provided to each new employee when receiving all other materials at his or her orientation
3. Create an environmental awareness, responsibility or sustainability training that must be taken periodically by all employees just as a code of ethics, safety, or harassment training would be required

C. Time frame, project costs, and resource needs

Costs and resources could be kept to a minimum for this action. The only external costs associated with this would come if the local government chose to hire an outside consultant to develop the sustainability guide or provide the sustainability training. Otherwise, the human resources department and possibly environmental or sustainability staff would be responsible for organizing resources, ensuring their delivery to new employees, and maintaining a record of training provided to current employees. The primary effort will be during the planning phases of this action, and time required maintaining the program will be minimal.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government and will primarily be the responsibility of the human resources department to implement and maintain.

E. How to obtain points for this action

Local governments earn points for this action by incorporating environmental resource conservation and efficiency principles and internal requirements and responsibilities into staff policies, materials, and trainings.

F. What to submit

Copies of the documentation given to employees, including orientation materials and/or training materials should be provided, as well as reports of the number of employees receiving the materials and training over time. The submitted documents must be currently in use to receive points for this action.

G. Links to Additional Resources or Best Practices

- HR's Role in Corporate Social Responsibility and Sustainability: http://www.shrm.org/about/foundation/products/documents/csr%20exec%20briefing-%20final.pdf

- New York City Department of Education, Creating a Culture of Sustainability Through Staff and Faculty Training Programs: http://schools.nyc.gov/NR/rdonlyres/AC142198-3E95-4668-BAA5-03D027A41C4F/114026/DOESustainableOperationsJTSNov7th_rev3.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Energy and GHG Management Policies and Systems

3.31 IMPLEMENT AN ENERGY OR GHG MANAGEMENT SYSTEM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

To effectively manage energy use and GHG emissions, local governments need a system for tracking this data. An energy or GHG management system enables both department managers and energy managers to have up to date information on energy use, and to compare energy use from one year to the next. Some communities chose to develop their own systems for tracking energy use and GHG emissions, but a variety of software tools and applications are on the market to assist local governments in managing their government operations energy use and GHG emissions, and community GHG emissions.

An energy management system can be used for tracking building energy use, and often fuel consumption and energy use in other stationary equipment, such as lighting. A GHG management system allows for both tracking of energy use and can be used to calculate GHG emissions from buildings, vehicle fleet, waste, and other emissions sources. Local governments may use a GHG management system to develop their baseline emissions inventories, but in many cases local governments implement energy or GHG management systems after developing their baseline inventories and realizing that they need a more robust tool for managing their data. Both energy and GHG management systems can be used for gathering the data a local government would require for the benchmarking and disclosure of energy data, as described in Action 3.32.

B. How to implement this action

Local governments can implement this action through the following steps:

1. *Determine the goals and requirements for the system:* Is the focus of the tool on tracking building energy use, or do you also want to track fuel consumption, waste, and other energy sources? Do you want to use the tool to develop a GHG emissions inventory? Are you primarily interested in tracking government operations data, or do you also want to track information on community energy use and GHG emissions?
2. *Review available tools on the market:* Analyze the functionality, price, support services, customer base, and planned improvements for the energy and GHG emissions

management tools on the market. Review any white papers or reports comparing the various software packages.

3. *Develop a budget and a plan for managing the system:* Determine the initial budget for implementing the system, along with any budget or staff time needed to manage the system on an ongoing basis.
4. *Select the tool which best meets your requirements and budgetary constraints.*
5. *Implement the tool.*
6. *Migrate data from any legacy systems.*
7. *Begin collecting new data with the tool.*

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs for implementing an energy or GHG emissions management tool vary depending on the complexity of the selected tool and the provider. Tools may involve some upfront costs for implementation in addition to annual licensing fees; however, some tools can simply be downloaded with no implementation costs other than staff time. Regardless of the size of the community, local governments must invest some staff time into setting up and managing an energy or GHG emissions management system.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

An energy management system is typically implemented by an energy manager or the department of public works or buildings, but could reside in a different department. Some vehicle fleet managers have separate tools for managing vehicle fleet consumption. A GHG emissions management system is often managed by the CSC coordinator or staff member acting in this capacity, who could be in the chief elected official's office, the department of planning, public works, or environment.

E. How to obtain points for this action

Local governments should implement a system for tracking energy use and/or GHG emissions from their government operations and/or community.

F. What to submit

Local governments should submit documentation demonstrating that their energy or GHG emissions management system is operational, such as a report from the system or a screenshot of the system in use.

G. Links to Additional Resources or Best Practices

- ICLEI USA, CACP 2009: http://www.icleiusa.org/tools/cacp-2009
- The Climate Registry, Climate Registry Information System (CRIS): http://www.theclimateregistry.org/climate-registry-information-system-cris/
- Verdantix Green Quadrant Energy Management Software report: http://www.linkcycle.com/review-of-top-energy-management-software/
- Review of Top 10 Energy Management Software: http://www.linkcycle.com/review-of-top-energy-management-software/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

3.32 ADOPT AN ENERGY BENCHMARKING REQUIREMENT FOR GOVERNMENT-OWNED BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

Energy benchmarking for government-owned buildings involves tracking annual energy use, reporting and publicly disclosing the data using EPA's Energy Star Portfolio Manager tool, and comparing building performance with other comparable buildings. This promotes transparency in government operations and lays the groundwork for the local government to identify opportunities for improving energy efficiency in government-owned buildings.

B. How to implement this action

Local governments can implement this action by first adopting a policy or ordinance requiring the annual benchmarking and reporting of local government energy and water use for buildings over a certain size. Once the policy is adopted, local government staff can establish the systems necessary for tracking this information. Many energy and greenhouse gas emissions management systems, as described in Action 3.31, integrate seamlessly with EPA's Portfolio Manager, allowing local governments to track all of their energy data in one system, and then export the data to Portfolio Manager when necessary.

To implement an energy benchmarking program, local governments can use the EPA Portfolio Manager and Energy Star systems as the framework for their programs but must define building size thresholds and the type of buildings covered by the mandate.

The following types of local government buildings are currently tracked in EPA's Portfolio Manager:

- Courthouse
- Drinking Water Treatment & Distribution
- Fire Station
- Library
- Mailing Center/Post Office
- Police Station
- Prison/Incarceration
- Social/Meeting Hall
- Transportation Terminal/Station
- Wastewater Treatment Plant
- Other

C. Time frame, project costs, and resource needs

Implementing an energy benchmarking requirement can take approximately six to twelve months, to develop and adopt the legislation and establish the systems for tracking energy use. Depending on the quality and availability of data already in place, the level of effort to implement this action could be minimal, or could require further staff time if no systems are in place.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments, although only certain building types will be relevant for tracking in EPA's Portfolio Manager. The planning or buildings department will most likely be responsible for implementing this action.

E. How to obtain points for this action

Points are earned for this action through formal adoption and implementation of a benchmarking requirement that requires government buildings over a certain size or of a certain type to monitor and publicly disclose their energy use.

	Possible Points
• Adopt an energy benchmarking requirement for government-owned buildings	2
• Implement the energy benchmarking requirement for government-owned buildings	2

F. What to submit

Documentation of formal policy or code adoption as well as details on how it is being implemented and enforced. The benchmarking requirement may have been adopted at any time prior to the application date, but must be actively in use to receive full points for this action.

G. Links to additional resources or best practices

- EPA ENERTY STAR Portfolio Manager: http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager
- City of Seattle Energy Benchmarking and Reporting Program: http://www.seattle.gov/environment/benchmarking.htm
- District of Columbia Energy Benchmarking: http://green.dc.gov/energybenchmarking
- New York City Benchmarking: http://www.nyc.gov/html/dob/html/sustainability/benchmarking.shtml
- Minneapolis, MN Building Rating and Disclosure Policy: http://www.minneapolismn.gov/www/groups/public/@regservices/documents/webcontent/wcms1p-102210.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 4: INCREASE COMMUNITY USE OF RENEWABLE ENERGY

Set a goal to maximize the use of renewable energy for government operations. Implement renewable energy projects such as solar, wind, geothermal, or small hydro.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 4: Increase community use of renewable energy			**62**	
Policies, Planning, and Financing			**20**	
4.1	Adopt a green power purchase policy to ensure increasing local government energy supplies come from renewables	Assess, Plan, Govern	4	
4.2	Require that new construction of local government buildings is "PV-Ready" *(under development)*	Assess, Plan, Govern	4	
4.3	Conduct feasibility studies for renewable energy installations	Assess, Plan, Govern	5	
4.4	Purchase renewable energy credits	Implement	7	
Increase Use of Renewables			**42**	
4.5	Install a geothermal heat pump or other geothermal technology at a new or existing public facility	Implement	9	
4.6	Install solar hot water and/or solar photovoltaic technology on public property	Implement	9	
4.7	Serve as a host site for a renewable energy installation and enter into a long-term service contract or power purchase agreement (PPA)	Implement	9	
4.8	Install a wind system on public property	Implement	9	
4.9	Install a wood pellet heating system on public property	Implement	6	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Policies, Planning, and Financing

4.1 ADOPT A GREEN POWER PURCHASE POLICY TO ENSURE INCREASING LOCAL GOVERNMENT ENERGY SUPPLIES COME FROM RENEWABLES

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4

A. Why is this action important?

Adoption of a policy to encourage or require the use of renewable energy sources for government operations will drive the market for renewable energy. Such a policy establishes the political support for using renewable energy and should allocate funding for the purchase or installation of renewables or for renewable energy credits (RECs). A renewable purchase policy will help local governments achieve their GHG emissions reduction goals and will also demonstrate to the public the government's commitment to reducing GHG emissions associated with use of power.

B. How to implement this action

Local government staff should work with elected officials to build political support for the purchase or installation of renewable energy. You may want to start by proposing a strategy to increase the purchase or use of renewables over time to more gradually phase in more renewable energy and spread costs over time.

The next step in this process is to develop a draft policy or resolution for adoption by the legislative body. This can be developed by local government staff and/or by an elected official. Local governments may seek to gather public input for this policy through engagement with key stakeholders and/or the public at large. Building political support for this policy could happen as part of the development of a climate action plan or similar plan, or it could be a standalone initiative to develop and pass a renewable energy policy.

In drafting the policy, local governments should take into consideration any renewable energy feasibility studies that have been performed to develop a strategy and plan for increasing the use of renewables. If a feasibility study has not been performed, local governments may want to include one as a requirement in the policy.

Once the policy is finalized and passed, communities will likely want to celebrate this accomplishment through a press release or event designed to increase public awareness around renewable energy.

As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Time frame, project costs, and resource needs

The time frame for establishing such a policy depends on the political support for renewable energy. The costs and resource needs for developing a policy and passing a resolution or law are considered part of the normal legislative costs. However, some local governments may elect to perform a

renewable energy feasibility study as part of developing the legislation, which will require local government staff time and possibly consultants.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government and should be adopted by the legislative body.

E. How to obtain points for this action

Adopt a policy, resolution or law to encourage the use of renewable sources that includes targets and goals for the proportion of energy use to come from renewable sources. To receive full credit for this action, local governments should develop a plan for implementing the policy that outlines the approach to increasing the use of renewables in government facilities. This plan could be included in the policy or resolution or could be a standalone document.

	Possible Points
• Adopt a resolution or policy to increase usage of renewable energy	2
• Develop a plan or strategy for increasing the use of renewables	2

F. What to submit

Documentation of the adopted policy, including a plan or strategy for implementing the policy, and if possible, progress toward meeting targets. The policy may have been adopted any time prior to the application date and the local government.

G. Links to additional resources or best practices

- Climate Smart Communities, Renewable Energy for Climate Smart Communities: http://www.dec.ny.gov/energy/91964.html
- DEC, Renewable Energy: http://www.dec.ny.gov/energy/40899.html
- U.S. EPA, Green Power Procurement, http://www.epa.gov/statelocalclimate/resources/strategy-guides.html
- DSIRE Examples of Local Green Purchasing Policies: http://www.dsireusa.org/incentives/index.cfm?EE=1&RE=1&SPV=0&ST=0&sector=Local&implementingsector=L&searchtype=Purchase&sh=1

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.2 REQUIRE THAT NEW CONSTRUCTION OF LOCAL GOVERNMENT BUILDINGS IS "PV-READY"

Under Development

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

4.3 CONDUCT FEASIBILITY STUDIES FOR RENEWABLE ENERGY INSTALLATIONS

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 5

A. Why is this action important?

Prior to implementing any renewable energy technologies, local governments must understand which technologies are most feasible or applicable to their local constraints. A feasibility study evaluates the geographical, technological, financial, and regulatory considerations around implementing renewable energy for government operations.

B. How to implement this action

Local governments should determine the types of technologies they would like to include in the scope of the study, such as wind, solar, biomass, or geothermal, and then develop a scope of work for the study. Most local governments must hire an external consultant with expertise in analyzing and implementing renewable energy systems. The consultant should be familiar with state and local regulations, various renewable energy technologies and the cost to implement those technologies. Depending on the scope and budget for the study, many local governments must go through a formal purchasing process and issue a request for proposals.

Some communities may also want to consider working with a local university to analyze renewable energy options as a student project. Many graduate level courses include projects with external "clients" to allow students to work on real problems. These types of reports can be a useful way to gather some initial information on the feasibility of various technologies; however, they are not a substitute for a more comprehensive feasibility study performed by an engineer or renewable energy expert.

C. Time frame, project costs, and resource needs

The time frame to complete a renewable energy feasibility study depends on the scope of the analysis. Local governments can estimate approximately 3 to 6 months to complete the study. The project will require a project manager or liaison from the local government and for most local governments the expertise of an outside consultant. Local governments could also consider working with a local university with relevant expertise to complete an initial analysis.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any type of local government. The department with the responsibility for purchasing electricity could have responsibility for this; however, other departments such as the sustainability office, economic development, or facilities may also be involved or lead the effort.

E. How to obtain points for this action

Local governments can earn points for this action by submitting a completed feasibility study, which analyzes the potential for at least one, if not more, renewable energy technologies. The study should take into account geographical and local considerations, policy considerations, financing options, costs, and risks.

	Possible Points
• Conduct a feasibility study for 1 renewable energy technology	3
• Conduct a feasibility study for 2 renewable energy technologies	4
• Conduct a feasibility study for 3 or more renewable energy technologies	5

F. What to submit

Local governments must submit a copy of a feasibility study that was completed within five years of the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Renewable Energy for Climate Smart Communities: http://www.dec.ny.gov/energy/91964.html
- U.S. EPA, On-Site Renewable Energy Generation: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs: http://www.epa.gov/statelocalclimate/resources/strategy-guides.html
- U.S. EPA, RE-Powering America's Land: http://www.epa.gov/oswercpa/
- Columbia University, CHP in NYC: A Viability Assessment: http://www.stephenhammerphd.com/uploads/1/0/4/1/10415201/chp_study_2007.pdf
- NYSERDA Renewable Energy**:** http://www.nyserda.ny.gov/renewable

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.4 PURCHASE RENEWABLE ENERGY CREDITS (RECS)

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 7

A. Why is this action important?

A renewable energy credit (sometimes referred to as a renewable energy certificate or "green tag") is an environmental commodity that represents the added value, environmental benefits and cost of renewable energy above conventional methods of producing electricity, namely burning coal, oil and natural gas. RECs help wind farms and other renewable energy facilities grow by making them more financially viable, thereby incentivizing development of renewable energy sources. Renewable energy facilities generate renewable energy credits (RECs) when they produce electricity. Purchasing these credits is the widely accepted way to reduce the environmental footprint of electricity consumption and help fund renewable energy development. For jurisdictions that are unable or elect not to install their own renewable energy systems, purchasing RECs allows them to offset their energy consumption by supporting the production of more renewable energy nationally. Purchasing certified RECs ensures that the REC meets certain quality standards and was produced using accepted renewable energy technologies.

B. How to implement this action

Local governments seeking to increase their use of renewables should evaluate the costs and benefits of installing renewable technology locally versus purchasing RECs. For local governments that do not have suitable conditions for renewable technologies such as wind or solar, or who do not want to go through the process of installing renewable energy systems locally, RECs could be a good option.

RECs command a lower price premium than other green power options, such as onsite systems, for several reasons: 1) RECs have no geographic constraints and therefore can provide access to the least expensive renewable resources; 2) the supplier does not have to deliver the power to the REC purchaser, avoiding the associated transmission and distribution costs; 3) the supplier is not responsible for meeting the purchaser's electricity needs on a real-time basis; and 4) REC prices reflect greater competition because RECs are fungible in a voluntary market.

Local governments should determine the amount of renewable energy they seek to purchase and negotiate the purchase of the RECs in conjunction with their annual or renewed electricity purchase agreement. The costs of renewable energy can fluctuate, so local governments should monitor the market and determine the quantity of renewable energy they are able to purchase. Many local governments will aim to establish an annual renewable energy target, such as 25 percent, and then find the most cost-effective approach to meeting that target.

The following factors should be taken into account when purchasing RECs:

- Duration of contract
- Quantity of renewables
- Renewable energy source
- Certification and vintage of the RECs

C. Time frame, project costs, and resource needs

The time frame to purchase RECs may depend on the process the local government follows to establish a contract to purchase electricity every year. Local governments may elect to sign a contract to purchase RECs for several years at a certain price to lock in a price and minimize the effort in the future to renegotiate the contract. The cost for purchasing RECs depends on the amount and length of the contract, along with the current market price for RECs.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. The department with the responsibility for purchasing energy for government owned facilities is most likely to be responsible for managing the purchase of RECs. However, a representative from the chief elected official's office and/or the sustainability office may also be involved in the analysis and planning for the REC purchase agreement.

E. How to obtain points for this action

Establish a program to regularly purchase Green-E certified (or the equivalent) RECs and demonstrate that RECs are actively being purchased.

	Possible Points
• Purchase RECs for 5-15% of total electricity use	2
• Purchase RECs for 16-30% of total electricity use	3
• Purchase RECs for 31-50% of total electricity use	5
• Purchase RECs +50% of total electricity use	7

F. What to submit

Documentation of the purchase of certified Green-E RECs (or the equivalent) and total electricity use for government operations. Local governments must demonstrate that they are actively purchasing RECs and that the RECs have been certified and are from a reputable source.

G. Links to additional resources or best practices

- Green-E Certified: http://www.green-e.org/
- Climate Smart Communities, Renewable Energy Overview: http://www.dec.ny.gov/docs/administration_pdf/renewablespart1.pdf
- U.S. DOE, Renewable Energy Certificates: http://apps3.eere.energy.gov/greenpower/markets/certificates.shtml
- U.S. EPA, Renewable Energy Certificates: http://www.epa.gov/greenpower/gpmarket/rec.htm
- NYSERDA, Renewable Energy: http://www.nyserda.ny.gov/renewable

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Increase Use of Renewables

4.5 INSTALL A GEOTHERMAL HEAT PUMP OR OTHER GEOTHERMAL TECHNOLOGY AT A NEW OR EXISTING PUBLIC FACILITY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 9

A. Why is this action important?

Geothermal technology harnesses the energy of the Earth to provide for heating and cooling needs. Geothermal heat pumps take advantage of the relatively constant temperature (50-60°F) of the Earth's surface layer as a heat source in winter and a heat sink in summer. Water circulates through wells to reach this moderate temperature, requiring less energy from electricity, gas, or oil for heating and cooling. Investments in geothermal heating and cooling often produce significant net

cost savings due to the high efficiency of ground source heating and cooling and the long-term reduction in energy costs. Other benefits of implementing geothermal technology include increasing the demand for renewable energy, lowering GHG emissions, and leading by example.

B. How to implement this action

Local governments considering retrofitting or remodeling an existing building, or in the process of designing a new building, should consider a variety of renewable energy options, based on their heating and cooling needs. Working with the engineering and design team, local government staff should evaluate if geothermal technology is appropriate for the building, location, and climate through a feasibility study. Local governments should also assess the payback period and policy considerations for such technology and consider how it could be used as an example for other buildings or projects in the community.

C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the geothermal technology is implemented in a new or existing facility, and the size or output of the system. Local governments should work with their contractors or consultants to develop an estimate for the additional cost and payback period for the proposed geothermal technology.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates buildings. Departments of facilities or public works would likely implement this action.

E. How to obtain points for this action

Install geothermal technology at a new or existing public facility. As long as the geothermal system is currently in use, the installation may have been completed at any time to be eligible for points.

F. What to submit

Documentation of the specific installation, including details on location, installation date, size, specification or purchase documents, and any estimates of energy savings. The installation must be actively in use.

G. Links to additional resources or best practices

- Climate Smart Communities, Renewable Energy Overview: http://www.dec.ny.gov/docs/administration_pdf/renewablespart1.pdf
- NYSERDA, Renewable Energy**:** http://www.nyserda.ny.gov/renewable
- U.S. Department of Energy, Geothermal Heat Pumps Fact Sheet: http://wwwnrel.gov/docs/legosti/fy98/24782.pdf
- U.S. Department of Energy Geothermal Technologies Program, http://www1.eere.energy.gov/geothermal/heatpumps.html
- Geothermal Heat Pump Consortium Case Studies

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.6 INSTALL SOLAR HOT WATER AND/OR SOLAR PHOTOVOLTAIC TECHNOLOGY ON PUBLIC PROPERTY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 9

A. Why is this action important?

Solar technologies reduce the carbon footprint of the community. By displacing energy from fossil fuel sources, the use of solar energy reduces air pollution and GHG emissions. A range of solar technologies capture energy from the sun for electricity or heating. Solar photovoltaic (PV) panels, in particular, transform solar radiation into electricity and are appropriate for many types of public facilities, including schools and public buildings. Other benefits of implementing solar technology include increasing the demand for renewable energy and setting a positive example for residents and businesses in the community.

B. How to implement this action

The first step is to perform a feasibility study and determine if solar hot water or solar photovoltaic technology is suitable for the local government and for the possible siting locations. If the study determines that solar technology is feasible, then the next step is to select a location on a new or existing public building or public property. Many local governments elect to install the solar technology on top of city hall or a similar prominent public building, to demonstrate to the public the government's commitment to energy conservation. Local governments should select and work with a NYSERDA approved contractor who can assist in determining the size of the system and how it will interact with the grid, particularly if the installation will produce a surplus of electricity for the building.

Local governments will want to analyze the costs and payback periods for such an installation and also take into account the co-benefits of the system, such as how it can be used as an example for other projects in the community. Maintenance, operation, public trust requirements and insurance should also be taken into consideration when developing and designing a solar system.

Local governments are advised to consult their municipal attorneys to ensure that all issues related to this use on public lands, including effects on resources held in the public trust are resolved.

C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the solar hot water or PV technology is implemented in a new or existing facility, and the size or output of the system.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates buildings. Environmental departments, or departments of engineering, facilities, or public works would likely implement this action.

E. How to obtain points for this action

Install solar technology at a new or existing public facility or on public property. As long as the solar technology is currently in use, the installation may have been completed at any time to be eligible for points.

F. What to submit

Documentation of the installation, including details on the location, installation date, technology used, system size, specifications, and purchase documents (receipts of purchase and specifications). The installation must be actively in use.

G. Links to additional resources or best practices

- Climate Smart Communities, Renewable Energy for Climate Smart Communities: http://www.dec.ny.gov/energy/91964.html
- U.S. EPA, Clean Energy Collaborative Procurement Initiative: http://www.epa.gov/greenpower/initiatives/cecp/index.htm
- NYSERDA, Renewable Energy: http://www.nyserda.ny.gov/renewable
- U.S. DOE, SunShot Initiative: http://www1.eere.energy.gov/solar/index.html
- National Renewable Energy Laboratory: U.S. Department of Energy, NREL Solar Research: http://www.nrel.gov/solar/
- American Solar Energy Society: http://www.ases.org/
- Solar Electric Power Association: http://www.solarelectricpower.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.7 SERVE AS A HOST SITE FOR A RENEWABLE ENERGY INSTALLATION AND ENTER INTO A LONG-TERM SERVICE CONTRACT OR POWER PURCHASE AGREEMENT (PPA)

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 9

A. Why is this action important?

Becoming a host site and entering into a long-term power purchase agreement (PPA) frees a community from the financing, ownership, operation, and maintenance of a solar, PV, wind or other type of renewable energy system. A third party, or the local utility, becomes the provider, and the local government agrees to purchase electricity from the provider. A PPA can expedite the installation process and reduces the risks and costs for the government around the implementation, operation, and maintenance of the system. Using renewable energy through a PPA also helps to increase the demand for renewable energy and supports the growth of local green jobs.

B. How to implement this action

Prior to entering into a PPA, local governments should perform a feasibility study to determine which type of renewable energy is appropriate for the proposed site(s) and within the financial and policy constraints of the jurisdiction. If the government determines that a PPA is feasible, the local government in conjunction with the provider should determine the size of the system, location, and

costs. Local governments may elect to host the installation on a new or existing building, and should consider installing the technology in a prominent location, such as city hall to utilize the installation as an educational opportunity.

Local governments should take the following factors into consideration when establishing a power purchase agreement:

- Length of agreement
- Pricing escalation rate
- Maintenance and repair costs
- Estimated output
- Production guarantees
- Insurance
- Public trust requirements

C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the solar, PV, or wind system is implemented in a new or existing facility, and the size or output of the system.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Applicable to any local government empowered to enter into long-term agreements with a power provider and owning property appropriate for hosting a solar thermal, solar PV, wind installation. Environmental departments, or departments of facilities or public works would likely implement this action.

E. How to obtain points for this action

Execute a power purchase agreement and provide public property for the purpose of the renewable energy system. The renewable energy system must be actively in use to receive points for this action. Local governments can receive points for the following types of renewable energy, purchased through a power purchase agreement:

- Solar
- Wind
- Geothermal
- Small hydro
- Wood pellet

F. What to submit

Local governments should submit a copy of the power purchase agreement, which outlines the duration of the contract, energy load and location of the system, and other relevant details. The solar installation must be actively in use.

G. Links to additional resources or best practices

- U.S. DOE, NREL Power Purchase Agreement Checklist for State and Local Governments: https://financere.nrel.gov/finance/content/power-purchase-agreement-checklist-state-and-local-governments

- U.S. DOE, Solar Photovoltaic Financing: Deployment on Public Property by State and Local Governments: http://www.nrel.gov/docs/fy08osti/43115.pdf
- U.S. DOE, SunShot Initiative: http://www1.eere.energy.gov/solar/index.html
- NYSERDA, Renewable Energy: http://www.nyserda.ny.gov/renewable

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.8 INSTALL A WIND SYSTEM ON PUBLIC PROPERTY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 9

A. Why is this action important?

Wind energy is 100-percent clean and provides a local source of environmentally sustainable energy, eliminating the carbon footprint and air pollution of fossil fuels. Small wind systems are suitable for a broad range of locations. They can generate up to 100 kW of electricity via turbines mounted on 30- to 140-foot towers and can be used in standalone applications or connected to the public energy grid. Wind power today is more viable than ever with systems that are quieter, more efficient, and less expensive than ever before. Installations continue to become more affordable.

B. How to implement this action

The first step in this process is to perform a feasibility study to determine if a wind installation is appropriate for the jurisdiction and identified location(s). This feasibility study will take into account possible locations, winds, costs, permitting and other restrictions, and other related factors to implementing the system. If the study concludes that a wind installation is feasible, the local government will want to select a suitable site for the installation. This can be on a new or existing public building or public property. Many local governments elect to install the wind technology in a prominent location, to demonstrate to the public the government's commitment to renewable energy sources. Local governments should select and work with a reputable contractor who can assist in determining the size of the system and how it will interact with the grid, particularly if the installation produces a surplus of electricity for the building or property.

Maintenance, operation, public trust requirements and insurance should also be taken into consideration when planning the installation.

C. Time frame, project costs, and resource needs

The time frame, project costs, and resource needs depend on whether the wind technology is implemented in a new or existing facility, and the size or output of the system.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates property where a wind installation is feasible. Environmental departments, or departments of facilities or public works would likely implement this action.

E. How to obtain points for this action

Install a wind system at a new or existing public facility or on public property. As long as the wind technology is currently in use, the installation may have been completed at any time to be eligible for points.

F. What to submit

Documentation of the specific installation, including details on location, installation date, size, specifications, purchase documents (receipts of purchase and specifications), and any estimates of energy savings. The installation must be actively in use.

G. Links to additional resources or best practices

- Climate Smart Communities, Renewable Energy for Climate Smart Communities: http://www.dec.ny.gov/energy/91964.htmlOverview:
  U.S. DOE, Stakeholder Engagement & Outreach: http://www.windpoweringamerica.gov/
- NYSERDA, Renewable Energy: http://www.nyserda.ny.gov/renewable

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

4.9 INSTALL A WOOD PELLET HEATING SYSTEM ON PUBLIC PROPERTY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 6

A. Why is this action important?

Many buildings use fossil heating fuels, such as oil or propane, for space heating. These fuels are often expensive and unstable in pricing and are threatening the global climate and sustainability of communities. Proven alternatives to fossil heating fuels exist and are already in use across North America: Biomass fuels are a local, renewable resource for providing reliable heat. Biomass is any biological material that can be used as fuel—including grass, corn, wood, and biogas as well as other forestry and agricultural residues. Wood pellets are a common type of biomass and are currently the only form of biomass recommended by NYSERDA for commercial and non-residential systems.

> Wood pellets in storage may release dangerous levels of carbon monoxide and volatile organic compounds. The Northeast Biomass Thermal Working Group is currently developing guidelines for bulk pellet storage (see http://www.biomassthermal.org/programs/fuel_safety.asp). Local governments should consider outdoor storage until guidelines for indoor bulk pellet storage are available.

should take into account possible locations, available materials, proximity to the wood pellet source, costs, permitting and other restrictions, and other related factors to implementing the system. If the study concludes that a wood pellet installation is feasible, the local government will want to select a suitable site for the installation along with a contractor to develop and implement the system.

C. Time frame, project costs, and resource needs

Installing a wood pellet system involves securing a source for the wood pellets and installing the system, which can take around two to three months. The costs depend on the price of the wood pellets at the time, and the price of the traditional fuel source that would otherwise be used, such as heating oil or natural gas. In many cases, wood pellets can offer a significant saving over fossil heating fuels.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government that owns and operates property where a wood pellet installation is feasible. Environmental departments, or departments of facilities or public works would likely implement this action.

E. How to obtain points for this action

Install a wood pellet heating system at a new or existing local government facility or on public property. As long as the wood pellet system is currently in use, the installation may have been completed at any time to be eligible for points.

F. What to submit

Documentation of the specific installation, including details on location, installation date, size, specifications, purchase documents (receipts of purchase and specifications), and any estimates of energy savings. The installation must be actively in use.

G. Links to additional resources or best practices

- NYSERDA, Renewable Energy: http://www.nyserda.ny.gov/renewable
- NYSERDA Cleaner Greener Communities Biomass Heating System Program Requirements: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Implementing-Smart-Development-Projects/Guidance-Documents.aspx
- Massachusetts Division of Energy Resources, Wood Pellet Heating Guidebook: http://www.mass.gov/eea/docs/doer/publications/doer-pellet-guidebook.pdf
- U.S. EPA, Biomass CHP: http://www.epa.gov/chp/basic/biomass.html
- U.S. EPA, Combined Heat and Power, http://www.epa.gov/statelocalclimate/resources/strategy-guides.html
- Biomass Energy Resource Center (BERC) Case Studies: http://www.biomasscenter.org/resources/case-studies.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 5: REALIZE BENEFITS OF RECYCLING AND OTHER CLIMATE-SMART SOLID WASTE MANAGEMENT PRACTICES

Encourage and support waste reduction, reuse, and recycling of materials community wide. Offer recycling and composting programs, household hazardous waste collections, and waste diversion opportunities that focus on reducing and reusing materials.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 5: Realize benefits of recycling and other climate-smart solid waste management practices			**49**	
Waste Diversion Policies and Plans			**6**	
5.1	Adopt a zero waste initiative policy	Assess, Plan, Govern	3	
5.2	Discourage the use of disposable bags (*under development*)	Assess, Plan, Govern		
Implement Waste Diversion Strategies			**43**	
5.3	Participate in the EPA WasteWise program	Implement	2	
5.4	Implement a pay-as-you-throw or similar unit pricing program	Implement	6	
5.5	Adopt a construction and demolition waste reduction program or policy	Implement	3	
5.6	Set up and manage a resource recovery center to encourage reuse of gently used or new materials that have been discarded	Implement	3	
5.7	Offer recycling to residents	Implement	8	
5.8	Offer recycling to commercial entities (or require that they recycle)	Implement	8	
5.9	Provide recycling bins in public places and events	Implement	3	
5.10	Provide compost bins to residents (for sale or free)	Implement	2	
5.11	Create an organics or yard waste collection program	Implement	6	
5.12	Host household hazardous waste collection days	Implement	2	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Waste Diversion Policies and Plans

5.1 ADOPT A ZERO WASTE INITIATIVE POLICY

Action pathway phase: Assess, Plan, and Govern
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

All communities are striving to reduce, reuse, and recycle waste, but getting to zero waste, where everything is reused and all materials are viewed as resources, is an ambitious end goal. According to the Zero Waste International Alliance in 2004: "Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."[1] Local governments can establish policies and strategies to set long-term goals to eliminate all landfilled or incinerated waste.

B. How to implement this action

This action is focused on passing a resolution or legislation establishing a zero-waste policy. Local government staff must work with elected officials to garner support for the proposed policy and then develop and pass the resolution or legislation. As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Time frame, project costs, and resource needs

The time frame for enacting a zero-waste policy depends on the political support for such an action. The project costs primarily involve staff time for developing the policy, but some local governments may elect to use a consultant to perform an analysis or develop a plan for implementing the policy. The implementation of the policy could have additional costs to provide new waste management services or expanding existing services.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable any local government. The chief elected official, legislative body, CSC coordinator, department of public works, or other department that manages solid waste are most likely to be responsible.

E. How to obtain points for this action

Adopt a zero-waste policy or legislation that sets a goal year and establishes the related programs that will assist the local government in achieving that goal.

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[1] Zero Waste International Alliance (ZWIA) http://zwia.org/.

F. What to submit

A copy of or link to the policy or legislation establishing the zero-waste policy. The policy may have been adopted at any time, but the local government must be actively implementing it. Local governments should also submit documentation demonstrating how they are planning to achieve the goals in the policy.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- New Paltz Zero Waste Program: http://www.newpaltzreuse.org/
- San Francisco (City and County) Zero Waste Legislation: http://www.sfenvironment.org/zero-waste/overview/legislation
- Zero Waste Alliance: http://www.zerowaste.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

5.2 DISCOURAGE THE USE OF PLASTIC BAGS

Action pathway phase: Assess, Plan, and Govern

Under development

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Implement Waste Diversion Strategies

5.3 PARTICIPATE IN THE U.S. EPA WASTEWISE PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 2

A. Why is this action important?

The U.S. EPA WasteWise program works with local governments, organizations and businesses to apply resource-efficient materials management practices to reduce government and select industrial wastes. Engaging businesses and organizations is an important way to reduce overall waste in a community. There are two ways to participate in this program: as a *partner* or an

endorser: *Partners* agree to reduce or recycle government solid waste and select industrial wastes, and to set annual waste diversion goals. Any organization that can measure and report waste can join as a *partner*. *Endorsers* agree to recruit organizations to become WasteWise *partners* or *endorsers* and provide both with promotional, educational, or technical information. Participants receive recognition for achievements, a WasteWise Climate Profile that outlines the GHG emissions (GHGs) achieved through waste diversion, educational materials, and free technical assistance to implement their waste reduction programs, and realize reduced purchasing and waste disposal costs.

B. How to implement this action

Local governments should review the EPA WasteWise program requirements and determine if it could be useful to them, and then make a commitment to join. The next step is to evaluate the benefits and requirements of the partner and endorser options and select which participation level is most appropriate for staffing levels and waste reduction goals.

To participate, local governments can apply online at http://www.epa.gov/epawaste/conserve/smm/wastewise/join.htm .

Participation as a *partner* requires the following:

1. Join WasteWise by completing the registration form in the EPA Waste Wise Sustainable Materials Management (SMM) data management system.
2. Submit baseline data into the EPA WasteWise SMM data management system within 90 days of registration.
3. Establish a first year goal of at least a 5-percent increase in waste diverted (a combination of waste prevention, recycling, and composting tonnage) as compared to baseline. This goal should be submitted along with baseline data.

Endorser requirements include the following:

- Endorsers should advance the mission of WasteWise through recruitment, education, marketing and outreach.
- Endorsers will be required to set a self-directed annual goal for endorser activities and report annually on their achievements through the SMM data management system. Endorser goals should include quantitative results against which progress can be measured, such as a target number of recruited partners or number of information events held. Endorsers will be notified when additional requirements are instituted.
- A listing of current partners and endorsers can be found at http://www.epa.gov/epawaste/conserve/smm/wastewise/about.htm .

Local governments that elect to join the program as partners should gather and submit the baseline data and then monitor progress toward achieving the first year waste reduction goal. Local governments that join as endorsers should establish a system for tracking their activities, such as the number of partners recruited, or ideally, the waste reduced by partners.

Local governments may elect to celebrate joining EPA WasteWise by holding an educational event, issuing a press release, or promoting it through an annual report or related plan. Further celebration or engagement with the public would be appropriate if the local government or recruited partners achieve their annual waste reduction goals.

C. Time frame, project costs, and resource needs

Joining the EPA WasteWise program is particularly recommended for local governments already implementing waste reduction measures or engaging with their communities to reduce waste. For local governments already taking action, participating in EPA WasteWise will require minimal staff time, to simply track progress toward achieving goals and report to the program.

Local governments that are just beginning to focus on waste reduction activities will require some staff time and resources to promote waste reduction activities. Local governments can determine their own scope and depth of involvement in the program, and which types of measures they might want to take to reduce waste.

Participating in the program is an ongoing commitment; however, data and reports must only be submitted to the program annually.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable any local government. Departments of public works or other department that manages solid waste is most likely to be responsible.

E. How to obtain points for this action

To earn points for this action, local governments must have joined WasteWise and been active participants as either partners or endorsers of the program for one year prior to the application date. Local governments should follow the EPA WasteWise guidelines and report on progress annually toward meeting stated waste reduction goals.

	Possible Points
• Active participation in EPA WasteWise	1
• Demonstrated progress toward meeting EPA WasteWise goals	1

F. What to submit

Local governments must submit evidence of their enrollment and active participation in the program, including their current listing as a partner or endorser on the EPA WasteWise program website and a copy of their annual program report submitted to the WasteWise program, demonstrating how the local government is making progress toward meeting its waste reduction goals

G. Links to additional resources or best practices

- U.S. EPA WasteWise, Conserving Resources, Preventing Waste: http://www.epa.gov/epawaste/conserve/smm/wastewise/index.htm

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.4 IMPLEMENT A PAY-AS-YOU-THROW OR SIMILAR UNIT PRICING PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 6

A. Why is this action important?

Pay-as-you-throw (PAYT) programs (also known as unit pricing or variable-rate pricing) charges residents for the collection of solid waste based on the amount they throw away. This results in waste reduction, reduced waste disposal costs, increased waste prevention, increased participation in recycling and composting programs (where applicable), and reduction in GHG emissions related to waste transportation and decomposition. Traditionally, residents pay for waste collection through property taxes or a fixed fee, regardless of the amount of trash they generate. PAYT programs treat trash services just like electricity, gas, and other utilities; households pay a variable rate depending on the amount of service (in this case, trash) they use. This creates a direct incentive to recycle more and to generate less waste by associating a fee based on quantity.

B. How to implement this action

The first step in implementing a PAYT program is to obtain a commitment from the highest elected official and legislature to move forward with the program. This commitment could come in the form of a resolution, or the program could be an action in a climate action plan or solid waste management plan. Prior to committing to implement a PAYT program, local governments need to have a recycling program in place, preferably a curbside recycling program, and ideally some sort of organics recycling program as well. In addition, local governments may want to solicit public feedback on the program, to inform the public of the proposed program and to gather support for the implementation, before launching into the development of the program.

The next step in the process is to develop an implementation plan for a PAYT program that outlines the timeline and approach for implementing the program, the fee structure for waste collection, and the systems and processes needed to implement and manage the program. Implementing the PAYT program involves implementing the new fee structure for charging residents based on the quantity of waste. This involves new methods for weighing the waste upon pickup and updates to the billing process with the new fees. In addition, local governments will typically want to notify their residents of details of the program and the date it will begin, through the relevant website and often through direct mailers.

The main goal of this program is to reduce waste and increase recycling, so local governments will want to monitor and report on their progress in both goal areas.

To implement this action, a local government must perform the following:

- Set variable waste collection rates and charge residents accordingly (residents could be charged based on the total volume of waste or by the number of bags or containers)

- Establish an ordinance mandating that residents use the waste collection service
- Enforce size or weight limits on trash containers
- Implement technology and processes to gather residential waste volume data and update billing systems
- Enforce bans on illegal diversion, including dumping and burning of waste and adding non-recyclable materials to recycling bins
- Spend solid waste agency funds for activities beyond those associated with traditional solid waste management services (e.g., public education).

One possible unintended consequence of a PAYT program is an increase in dumping, the disposal of waste in vacant lots or rural areas. As part of the PAYT planning and implementation, local governments should develop and enforce regulations around illegal dumping.

C. Time frame, project costs, and resource needs

The time frame for implementing a PAYT program depends on the systems in place for waste collection and billing. A typical time frame for implementing a PAYT program is six months to a year. The costs of the program also depend on the existing systems and can be minimal if the waste collection and billing systems only need minor updates to accommodate the new program.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

The department of public works or sanitation or other department responsible for waste management services typically implements this program.

E. How to obtain points for this action

This action requires that a local government implement a PAYT (or other unit pricing) program. Local governments must demonstrate that the program is currently in place for at least 50 percent of residential customers.

	Possible Points
• Plan to implement a PAYT program	1
• Implement a PAYT (or other unit pricing) program	4
• Enforce illegal dumping regulations	1

F. What to submit

Local governments must submit documentation proving they have adopted and implemented a PAYT (or other unit pricing) program. This can be in the form of an ordinance or policy, along with reports illustrating the new fee structure in use. The resolution or commitment could have occurred at any time prior to the application date, and the implementation must have been active for at least one year prior to the application date. Local governments should also submit documentation of any regulations around illegal dumping.

G. Links to additional resources or best practices

- Climate Smart Communities, How to: Climate Smart Waste Reduction and Materials Reuse: http://www.dec.ny.gov/energy/72962.html#Throw

- U.S. EPA, Pay-As-You-Throw: Lessons Learned About Unit Pricing: http://www.epa.gov/epawaste/conserve/tools/payt/tools/lessons.htm
- U.S. EPA, SMART BET Calculator (helps local governments determine whether a unit-based pricing system for solid waste collection is the right model): http://www.epa.gov/epawaste/conserve/tools/payt/tools/smart-bet/index.htm

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.5 ADOPT A CONSTRUCTION AND DEMOLITION WASTE REDUCTION PROGRAM OR POLICY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

According to the U.S. EPA, Construction and demolition (C&D) debris consists of waste that is generated during new construction, renovation, and demolition of buildings, roads, and bridges. C&D debris often contains bulky, heavy materials, including the following:

- Concrete, wood, and asphalt (from roads and roofing shingles)
- Gypsum (the main component of drywall)
- Metals, bricks, glass, and plastics
- Salvaged building components, such as doors, windows, and plumbing fixtures[2]

Historically, much of the C&D waste generated in the Northeast was sent to landfills. However, landfill space is becoming increasingly limited in the Northeast. This diminishing landfill capacity and the increasing cost of landfill disposal have led to greater emphasis on the processing of C&D material to reduce its volume and to prepare it for use in new applications.[3] Local governments in New York are using a variety of programs and policies to promote deconstruction of unwanted C&D materials, including regulatory requirements and incentives for voluntary compliance.

B. How to implement this action

Local governments have several policy and programmatic approaches for managing C&D waste. Local governments may first elect to adopt a policy or legislation around the management of C&D waste and then, depending on the volume and type of waste, implement a program for managing the waste.

From the policy perspective, local governments can take the following types of steps:

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[2] U.S. Environmental Protection Agency, referenced in 2013: http://www.epa.gov/region1/solidwaste/cnd/

[3] *Construction and Demolition Waste Management in the Northeast in 2006,* June 30, 2009. http://www.newmoa.org/solidwaste/CDReport2006DataFinalJune302009.pdf

- Adopt an ordinance that requires separation of C&D materials at construction sites
- Adopt an ordinance that prohibits disposal of C&D materials in local landfills and at transfer stations
- Require that reusable and recyclable materials from construction and demolition sites be made available for salvage prior to disposal
- Require building projects to submit plans and reports indicating how they will reuse and recycle construction and demolition materials

Local governments that want to go a step further and implement a program to support the reuse of C&D materials can do the following:

- Work with a local Habitat for Humanity ReStore (http://www.habitat.org/restores) or similar organization to implement a program for construction and deconstruction projects
    - Provide incentives for private sector deconstruction and C&D recovery efforts

C. Time frame, project costs, and resource needs

For policy-based approaches, the time frame for adopting the policy depends on the political support for such an action. For programmatic based approaches, local governments are encouraged to develop creative solutions, collaborating with other organizations, such as Habitat for Humanity ReStore. This minimizes the need for government resources to support the program and can accelerate program implementation.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection and transport can adopt a program or policy. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

There are two options for obtaining points for this action:

	Possible Points
• Adopt C&D legislation or policies	1
• Implement a C&D program to support the reuse of C&D materials	2

F. What to submit

If the action is regulatory, submit a copy of, or link to, the ordinance, resolution or policy that requires specific action related to C&D materials. The policy may have been adopted at any time prior to the application date to receive points.

If the action is a program, please submit documentation that outlines the details of the program and the local government's role in actively implementing and managing the program. The program must be currently active to be eligible for points.

G. Links to additional resources or best practices

- Northeast Waste Management Officials' Association, Construction and Demolition Waste Management in the Northeast in 2006: http://www.newmoa.org/solidwaste/CDReport2006DataFinalJune302009.pdf
- U.S. EPA, Building Savings, Strategies for Waste Reduction of Construction and Demolition Debris for Buildings: http://www.epa.gov/osw/nonhaz/municipal/pubs/combined.pdf
- New York City Green Codes Task Force, New York City's Building Code -Recycle Construction Waste Proposal: http://www.nyc.gov/html/gbee/downloads/pdf/resource_conservation.pdf

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.6 SET UP AND MANAGE A RESOURCE RECOVERY CENTER TO ENCOURAGE REUSE OF GENTLY USED OR NEW MATERIALS THAT HAVE BEEN DISCARDED

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Many people are familiar with the saying, "one person's trash is another person's treasure." Material reuse is receiving more attention lately as a way to keep usable materials out of the waste stream. In addition to consignment stores, Habitat for Humanity's ReStores, local governments are taking it upon themselves to offer resource recovery centers, swap shops, or reuse marketplaces at public facilities to keep items from being disposed of in their landfills, incinerated or transported elsewhere. This reduces local government solid waste disposal and transport costs, reduces GHG emissions, and eliminating the need to use precious resources and energy to create new items.

B. How to implement this action

Local governments must evaluate options for implementing resource recovery centers and determine if such a program is appropriate for their communities. They must determine what types of materials the center will accept, and what requirements the center may have in terms of the condition of the materials. Local governments may elect to pilot such a program initially to gauge public interest and support in a recovery center, before moving forward with implementing the program. To measure the program's success, local governments should establish metrics to track the quantity of materials donated to the center, number of residents donating and reusing materials, GHG emissions avoided, and other similar metrics.

C. Time frame, project costs, and resource needs

The time and resources associated with establishing a resource recovery center depend on the type of center and the approach to implementing the program, such as operating hours and frequency of operation. Local governments might elect to pilot such a program, before turning it into an ongoing service.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection and transport can implement this program. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

Establish and manage a resource recovery center or swap shop for residents to donate unwanted gently used or new materials. Rules and regulations for donation and use of the center are highly encouraged.

F. What to submit

Documentation, including rules and regulations for center use and confirmation that the center is still actively in use, is required. A website promoting the use of the center is highly encouraged. The center must be currently active to receive points.

G. Links to additional resources or best practices

- DEC, Reuse: http://www.dec.ny.gov/chemical/8828.html
- Salisbury, Ct. Swap Shop: http://www.nerc.org/documents/town_business/ct/sharon_salisbury_transfer_station_in_action.pdf
- Reuse Marketplace: http://www.reusemarketplace.org/

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.7 OFFER RECYCLING TO RESIDENTS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 8

A. Why is this action important?

For nearly 20 years, New York State law has included a requirement for municipalities to enact local recycling laws. General Municipal Law § 120-aa requires each municipality to adopt a local law or ordinance mandating that solid waste be separated into recyclable, reusable or other components.[4] Recycling is one of the most common actions that local governments take to protect the environment, save energy, halt precious resource depletion, reduce GHG emissions, and cut municipal solid waste costs. Recycling is the process of separating, collecting, and remanufacturing used products into new materials.[5] Almost everything we use can be recycled including batteries, clothing, electronics, glass, metals, and plastics. The most common form of household recycling is

[4] NYS Department of Environmental Conservation, Climate Smart Communities–*How-To Climate Smart Recycling and Composting*: http://www.dec.ny.gov/energy/57200.html#recycling

[5] Benefits of Recycling: http://www.benefits-of-recycling.com/whyisrecyclingimportant/

through segregation of materials into separate bins or containers (i.e., paper in one container and plastic, glass and metals in another container).

B. How to implement this action

Local governments are required by state law to enact and establish recycling programs. Local elected officials can make a commitment to provide recycling services by passing a local law or resolution. Local governments may also elect to establish a target recycling rate, which could increase over time after the program is implemented. For communities that currently do not provide recycling, they must determine what approach to recycling meets the needs and resources for the community. Possible options for providing recycling services include single-stream recycling or segregated recycling, and collection options include curbside pickup, drop-off, or special collection. Recycling programs can be either voluntary or mandatory. A useful resource developed by the New York State DEC, Recycling: A Planning Guide for Communities: http://www.dec.ny.gov/docs/materials_minerals_pdf/lswmplanning.pdf can help local governments plan and implement a new or expanded recycling program.

As part of implementing a recycling program, local governments will must either establish capacity at existing facilities or identify new facilities for processing the recycled goods. Local governments will often want to appoint a recycling coordinator, or have someone take on this role to implement and manage the program.

Implementing the recycling program involves implementing the selected approach for separating recyclables, collecting the materials, storing, and processing the materials. Local governments may elect to perform these services themselves, or contract the services out to a reputable service provider. Local governments should establish a process and metrics for monitoring the quantity of waste that was recycled and report on those metrics regularly.

C. Time frame, project costs, and resource needs

The time frame for implementing a new recycling program depends on the existing resources and approach to managing the program, if a local government plans on contracting out the services or providing some services in-house. Local governments can estimate approximately one year to develop and implement a new recycling program. The costs of the program can also vary, depending on how the costs are passed on to the residents. It is recommended that local governments appoint a recycling coordinator to manage the program.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection can implement this program. Departments of sanitation or public works are most likely to implement this action.

E. How to obtain points for this action

Local governments can earn points for this action by providing recycling for residents. Recycling can either be segregated or single-stream, and either voluntary or mandatory. Additional points are given to local governments with single stream or mandatory recycling.

	Possible Points
• Develop recycling plan, program strategy, or program guidelines	1

- Provide voluntary drop-off recycling 2
- Provide voluntary curbside recycling 4
- Provide mandatory curbside recycling 5
- Enforce mandatory recycling 1
- Provide single stream recycling 1

F. What to submit

Documentation that confirms the recycling program is active and outlines the recycling program parameters and what is collected. A website can be provided if the details about the program are outlined. The documentation should indicate whether the recycling program is voluntary or mandatory. For mandatory programs, local governments must also provide documentation demonstrating how the program is enforced. Outreach and educational materials should be submitted as well. If local recycling services are provided by a county, provide evidence of how the applicant supports the countywide program.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- Benefits-of-Recycling: http://www.benefits-of-recycling.com/
- DEC, Recycling: A Planning Guide for Communities: http://www.dec.ny.gov/docs/materials_minerals_pdf/lswmplanning.pdf
- DEC, Model Local Recycling Laws: http://www.dec.ny.gov/chemical/71036.html
- Source Separation of Recyclables Code, Albany, N.Y.: http://albanyny.gov/_files/Government/GeneralServices/313-11-25.pdf
- Albany Recycles Single Stream Program: http://www.albanyny.gov/Government/Departments/GeneralServices/TrashRecycling/Recycling.aspx
- Kingston Recycling Program: http://www.kingston-ny.gov/filestorage/76/94/City_of_Kingston_-_recycling_instructions.pdf
- Sullivan County Recycling Program: http://webapps.co.sullivan.ny.us/docs/dpw/solidwaste/SCDPWversionSSRRecyclingGuide2012a.pdf

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.8 OFFER RECYCLING TO COMMERCIAL ENTITIES (OR REQUIRE THEM TO RECYCLE)

Action pathway phase: Implement
Eligibility timeline: Currently active

Total possible points: 8

A. Why is this action important?

Recycling is one of the most common actions that local governments take to protect the environment, save energy, halt precious resource depletion, reduce GHG emissions, and cut local government solid waste costs. Recycling is the process of separating, collecting, and remanufacturing used products into new materials. Commercial entities and multi-family residential buildings, which are typically considered commercial entities for waste management purposes, generate significant quantities of waste that can also be recycled. A comprehensive recycling program not only includes residential recycling but also recycling options for businesses and multi-family residential buildings. Local governments can either provide recycling services to some or all commercial entities or mandate that they recycle and work with private waste haulers to implement a recycling program.

B. How to implement this action

The approach to implementing this action depends on how commercial waste is gathered in a jurisdiction. Local governments can establish legislation requiring that commercial recycling is provided in their jurisdictions, but implementation may be left up to commercial waste haulers. In such cases, local governments can establish reporting requirements for businesses and multi-family residential buildings to require these entities to demonstrate that they have made arrangements to recycle their recyclable items. Local governments that provide their own commercial waste hauling have a greater ability to implement commercial recycling, following a process similar to the one outlined above for residential recycling.

C. Time frame, project costs, and resource needs

The time frame for implementing this action depends on the degree of control a local government has over commercial waste hauling and recycling. Local governments that do not provide commercial waste hauling must pass a law and establish a process for reporting commercial recycling information.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection can implement this program. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

Implement a local government recycling program for multi-residential units and businesses by providing recycling services or requiring commercial entities to recycle. If commercial and multi-residential unit recycling cannot be implemented, require that these entities submit documentation that they have made arrangements, maintain and contract for private collection of their recyclable items. Additional points are provided for mandatory and single stream recycling.

	Possible Points
• Develop recycling plan, program strategy, or program guidelines	1
• Voluntary drop-off recycling	2
• Voluntary curbside recycling	4

- Mandatory curbside recycling 5
- Enforce mandatory recycling 1
- Provide single stream recycling 1

F. What to submit

Documentation that confirms the recycling program is active and outlines the recycling program parameters and what is collected. The documentation should outline if the recycling program is voluntary or mandatory. For mandatory programs, local governments must also provide documentation demonstrating how the program is enforced, to receive full points for this action. A website can be provided if the details about the program are outlined. Outreach and educational materials should be submitted as well. If local recycling services are provided by a county, provide evidence of how the applicant supports the countywide program.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- Benefits-of-Recycling: http://www.benefits-of-recycling.com/
- Recycling: A Planning Guide for Communities: http://www.dec.ny.gov/docs/materials_minerals_pdf/lswmplanning.pdf
- New York City Commercial Recycling Law: http://www.nyc.gov/html/nycwasteless/html/laws/local_commrecycling.shtml

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.9 PROVIDE RECYCLING BINS IN PUBLIC PLACES AND EVENTS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Placing recycling bins in public places, including parks, downtown, public buildings, recreation facilities, special events, and sports complexes, reduces waste and disposal costs and has the added benefit of encouraging citizens to do the same at home. According to the Franklin County Waste Management District, an attendee at a special event can generate as much as three pounds of waste[6]. Even if recycling bins are placed temporarily at large events, the environmental and economic benefits can still be realized.

[6] *Special Events Waste Reduction Guide*, Franklin County Waste Management District, June 2006: http://www.mass.gov/dep/recycle/reduce/toolkit/rspecialg.pdf

B. How to implement this action

Local governments should make a commitment to recycling and provide recycling bins in public places and at public events. Communities should determine which public areas have the highest foot traffic and waste volumes and prioritize locations for recycling bins based on these criteria. The U.S. EPA has a manual for how to set up an effective public recycling program that involves the following steps:

- Step 1: Select a Recycling Coordinator
- Step 2: Determine the Waste Stream
- Step 3: Practice Waste Prevention
- Step 4: Include Concessionaires, Staff, and Volunteers
- Step 5: Select a Contractor/Hauler
- Step 6: Set Up the Collection Program
- Step 7: Facilitate Outreach and Education
- Step 8: Monitor and Evaluate the Program

For public events, local governments should collaborate with concessionaires, staff, and volunteers to ensure they are aware of the recycling program and that they help to promote it. Local governments should identify what type of waste can be recycled, the locations for recycling bins, and the plans for waste collection. Communities can track the quantity of waste in the public recycling bins, and calculate the effect of the program in terms of GHG emissions reductions.

C. Time frame, project costs, and resource needs

The time frame to implement a public recycling program depends on whether a government, residential, or commercial recycling program already exists. Assuming some recycling program already exists, adding collection from public recycling bins is a minimal additional effort.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection can implement this program. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

Local governments can earn points for this action through the following:

	Possible Points
• Establish a recycling program in public places	2
• Establish a recycling program for large events	1

F. What to submit

Documentation that confirms that the recycling program is active and outlines the public recycling program details, including when, where and what is collected. Educational materials should be submitted, as well as pictures of the receptacles.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- U.S. EPA, Recycle on the Go: http://www.epa.gov/wastes/conserve/tools/rogo/index.htm
- Benefits-of-Recycling: http://www.benefits-of-recycling.com/
- Franklin County Waste Management District, Special Events Waste Reduction Guide: http://www.mass.gov/dep/recycle/reduce/toolkit/rspecialg.pdf
- Town of Clifton Park, N.Y.: 35 recycling bins on common: http://www.cdrpc.org/CSCommunities/CSC_Profile_Town_of_Clifton_Park.pdf

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.10 PROVIDE COMPOST BINS TO RESIDENTS (FOR SALE OR FREE)

Action pathway phase: Implement
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 2

A. Why is this action important?

Studies indicate that more than 25 percent of the typical household's waste is composed of yard trimmings and food scraps. According to DEC, organics made up nearly 24 percent of local government solid waste discarded in 2008.[7] Backyard composting provides an easy, inexpensive way for residents to reduce organic materials in the waste stream, which reduces local government solid waste costs, keeps the materials out of landfills and has the added benefit of producing 'black gold' (aka compost) for residents to use in their gardens.

B. How to implement this action

Local governments can implement this action by following the guidelines below:

- Make a commitment toward composting, which can be in the form of a resolution or an action in a climate action plan, solid waste management plan, or other plan
- Demonstrate the government's commitment to composting by establishing a composting program on government property
- Determine the appropriate quantity of composting bins, how to distribute them, and whether or not to charge for them

[7] *Solid Waste Composition and Characterization, MSW Materials Composition in New York State*: http://www.dec.ny.gov/chemical/65541.html

- Develop educational materials to be provided with the composting bins, since many residents are unfamiliar with what can be composted and the benefits of composting
- Provide information on the local government's website and at events about composting
- Track the number of bins distributed, and if possible, the reduction in waste that could be attributed to composting.

C. Time frame, project costs, and resource needs

Distributing composting bins can be a quick and easy approach to reducing waste in the waste stream. Local governments may elect to distribute free compost bins, provide a discount on the bins, or simply provide information to residents on where to purchase bins.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this program. Departments of public works or sanitation are the most likely departments to implement this action, but conservation advisory councils, garden clubs or other environmental committees have also taken the lead in villages and towns.

E. How to obtain points for this action

Offer backyard composting bins at a reduced price or free of charge. A local government can purchase compost bins in bulk from a qualified vendor, usually at a reduced price.

F. What to submit

Local governments should submit documentation that outlines the parameters of the compost bin distribution program. Educational materials should be submitted, as well as pictures of the receptacles. Any statistics about the reduction in waste as a result of the program are also encouraged. Compost bins must have been distributed within five years prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- Cornell University, Composting: http://compost.css.cornell.edu/outdoors.html
- DEC, Guide to Composting: http://www.dec.ny.gov/docs/materials_minerals_pdf/compost.pdf
- Village of Croton-on-Hudson, N.Y., Compost Bin sales: http://www.crotononhudson-ny.gov/public_documents/crotonhudsonny_webdocs/CompostBin2012.pdf
- Village of Montebello, N.Y., Free Compost Bins: http://www.villageofmontebello.com/Highlights/CompostBinRainBarrelSale.html
- Earth Machine: http://www.earthmachine.com/index_r.html
- New York City, Composting in New York City, A Complete Program History: http://www.nyc.gov/html/nycwasteless/downloads/pdf/composting_nyc1.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

5.11 CREATE AN ORGANICS OR YARD WASTE COLLECTION AND COMPOSTING PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 6

A. Why is this action important?

A large source of organic material in New York State is yard waste. According to the U.S. EPA report, *Characterization of Municipal Solid Waste in the United States: 2009 Update*, it is estimated that yard waste makes up 13.7 percent of the solid waste generated nationwide. It was estimated that nearly 1.1 million tons of yard waste were recycled in New York State in 2009.[8] Studies indicate that more than 25 percent of the typical household's waste is composed of yard trimmings and food scraps. According to DEC, organics made up nearly 24 percent of local government solid waste in 2008.[9] Many local governments have yard waste collection programs in which residents can bag or bundle their leaves and yard clippings and set them by the curb for regular collection. Yard waste is taken to a central facility where it is composted.

B. How to implement this action

Communities must first determine the types of materials to be gathered through the program, such as yard waste, leaves, and food scraps, and then design the program with public input. When planning for implementation of this program, please consider that the DEC regulates facilities involved with the land application, composting and other recycling methods of certain types of organic waste materials under Title 6 of the Official Compilation of Codes, Rules, and Regulations (6 NYCRR) Part 360 Solid Waste Management Facilities.

Local governments must also determine the approach for collecting the materials, i.e., at a drop-off facility or through curbside collection, and whether yard waste, organic materials or both will be collected.

As part of the planning and implementation process, local governments will want to engage the public in the design of the program and educate the public and local government staff in the benefits of yard waste and organics collection.

Local governments may elect to implement the program throughout the jurisdiction, or perhaps first in a pilot area. To measure the impact of the program, local governments should track the quantity of organic waste collected through the program and calculate the GHG emissions avoided.

C. Time frame, project costs, and resource needs

Describes the typical Time frame for implementing this action along with the costs and resource must implement the action.

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[8] NYS Department of Environmental Conservation, *Recycling Organic Materials and Facilities*: http://www.dec.ny.gov/chemical/8509.html

[9] *Solid Waste Composition and Characterization, MSW Materials Composition in New York State*: http://www.dec.ny.gov/chemical/65541.html

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection can implement this program. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

Design and implement a yard waste or organics collection program that allows residents to collect and discard yard clippings, leaves, and/or food waste either by dropping off the materials at a designated location or through a curbside pick-up program and includes ultimate disposal of the waste at a compost facility.

	Possible Points
• Establish a drop-off yard waste program	1
• Establish a drop-off food waste program	1
• Establish a curbside pick-up yard waste program	3
• Establish a curbside pick-up food waste collection program	3

F. What to submit

Documentation outlining the details associated with the program including types of materials collected, when and how it is collected, where it goes, and any other requirements for residents related to this program. The documentation should confirm that the program is currently active. A website with this information may be submitted.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html
- DEC, Recycling Organic Materials at Facilities: http://www.dec.ny.gov/chemical/8509.html
- Village of Tarrytown, N.Y., Yard Waste Collection Program: http://www.tarrytowngov.com/Pages/TarrytownNY_DPW/FAQ#YardWaste
- City of Albany, N.Y., Yard Waste Collection: http://www.albanyny.gov/_files/Government/GeneralServices/SS2011Web.pdf \
- Town of Ossining, N.Y., Yard Waste Recycling: http://www.villageofossining.org/Cit-e-Access/webpage.cfm?TID=24&TPID=10917
- Watervliet, N.Y., Organic Waste Recycling: http://watervliet.com/welcome/

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.12 HOST HOUSEHOLD HAZARDOUS WASTE COLLECTION DAYS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 2

A. Why is this action important?

Household hazardous waste (HHW) comprises materials found in residential products that contain potentially hazardous chemicals that are harmful to human health and the environment when not handled correctly. They pose a threat to our water, air and wildlife when not disposed of appropriately. Common HHW includes oil-based paints, household cleaning products, pesticides, automotive fluids, compact fluorescent bulbs, and hobby chemicals. Electronics also pose a threat to the environment. Certain components of some electronic products contain materials that are hazardous. For example, CRTs (cathode ray tubes) from televisions and monitors are considered hazardous. Lastly, pharmaceuticals have become an increasing concern due to their impact on the environment and water systems when disposed in landfills.

B. How to implement this action

Local governments should determine the type of materials they wish to collect and how they will dispose of the materials once collected. The collection could be on certain days throughout the year, such as Earth Day, or it could be an ongoing program to allow residents to drop off specified materials at designated locations.

C. Time frame, project costs, and resource needs

The timing and effort to implement a hazardous waste program depends on the approach to implementing the program. Local governments will want to identify a means of disposing or recycling the materials that will minimize the impact on the environment. Local governments may have an additional cost of contracting out the disposal of these products with a designated contractor that handles household hazardous materials.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government that manages solid waste collection can implement this program. Departments of public works or sanitation are the most likely departments to implement this action.

E. How to obtain points for this action

Establish a permanent or regularly scheduled household hazardous waste collection program and provide documentation for the ultimate disposal of the waste collected. The hazardous waste collection program is an event or part of a larger event, it should occur at least once a year for multiple days, and must be advertised to the public.

F. What to submit

Documentation outlining when, where and what items are collected. A website with this information can be submitted. The documentation should confirm that this program is active.

G. Links to additional resources or best practices

- Climate Smart Communities, Climate Smart Waste Management: http://www.dec.ny.gov/energy/57186.html

- Rockland County Solid Waste Management Authority, Household Hazardous Waste Collection: http://www.rocklandrecycles.com/docs/HHWBrochure2013.pdf
- DEC, Household Hazardous Waste: http://www.dec.ny.gov/chemical/8485.html
- DEC, Household Hazardous Waste State Assistance Program: http://www.dec.ny.gov/chemical/8778.html
- DEC, Household Hazardous Waste Collection Programs in New York State: http://www.dec.ny.gov/chemical/8780.html
- National Take-Back Day (for pharmaceuticals): http://www.deadiversion.usdoj.gov/drug_disposal/takeback/

H. Recertification requirements

The requirements for recertification are the same as the requirements for the initial certification.

5.13 CREATE AN EDUCATIONAL CAMPAIGN TO ENCOURAGE RECYCLING, COMPOSTING AND WASTE REDUCTION

Action pathway phase: Implement
Eligibility timeline: Within 3 years prior to the application date
Total possible points: 2

A. Why is this action important?

Local governments play an important role in educating the public about the benefits of recycling, composting, and reducing waste. Reducing waste, reusing materials, and recycling reduce GHG emissions from waste disposition, such as in landfills, along with reducing "upstream" emissions associated with the extraction, processing, and transportation of materials.

B. How to implement this action

Local governments can build upon local, regional, state, and national waste reduction, composting, and recycling campaigns to increase waste diversion. Steps to develop a campaign may include:

- Determine the scope and purpose of the campaign and whether it should focus on waste reduction more broadly, or on a specific aspect of waste management, such as composting or reusable bags
- Survey existing educational efforts of the local government and external stakeholders ranging from local to national organizations (e.g., a local nonprofit may already host a "how to" composting series)
- Use existing methods of communication to distribute campaign marketing materials, and determine which new methods are necessary to quickly and effectively engage the community in the campaign
- Develop the content and solicit feedback from a select group of stakeholders such as an existing energy or climate external advisory board
- Ask the highest ranking elected official to launch the campaign—consider hosting it on a milestone such as Earth Day, New York Recycles Day or the anniversary of the release of the climate action plan

Alternatively, the local government can actively support and promote to its community an existing campaign of another organization or community. Active promotion would include an official launch and development or dissemination of marketing materials.

C. Time frame, project costs, and resource needs

Creating the campaign can take as little as a few months or more than a year to develop and implement. Project costs can range from staff and volunteer time, marketing materials, launch event costs, and developing and hosting a website. For supporting another party's campaign, the project costs would involve staff time and potentially the development of marketing materials.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of the environment or public works.

E. How to obtain points for this action

Points for this action can be earned by creating a waste reduction, composting, or recycling campaign to educate the public about waste related issues and to encourage waste reduction and recycling. The campaign must be targeted to residents and other audiences in the CSC.

F. What to submit

Local governments must submit the primary outreach documentation of a campaign (e.g., website link, flyer) targeting residents and other audiences in the CSC. The campaign must have taken place within the past three years.

G. Links to additional resources or best practices

- New York, NY, Recycling education materials: http://www.nyc.gov/html/nycwasteless/html/recycling/recycle_what.shtml
- U.S. EPA's Tools for Local Government Recycling Programs webpage: http://www.epa.gov/waste/conserve/tools/localgov/index.htm

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 6: REDUCE GREENHOUSE GAS EMISSIONS THROUGH USE OF CLIMATE-SMART LAND-USE TOOLS

Minimize the greenhouse gas impact of new development. Update or adopt community plans, land-use policies, building codes, and multi-modal transportation actions to reduce sprawl, vehicle miles traveled, and protect open lands, wetlands and forests.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 6: Reduce greenhouse gas emissions through use of climate-smart land-use tools			**109**	
Develop a Plan			**9**	
6.1	Develop and adopt a comprehensive plan with sustainability elements	Assess, Plan & Govern	9	
Land Use and Building Codes			**31**	
6.2	Incorporate smart growth principles into land-use policies and regulations	Assess, Plan & Govern	8	
6.3	Adopt a renewable energy ordinance	Assess, Plan & Govern	4	
6.4	Establish green building codes	Assess, Plan & Govern	6	
6.5	Create resource-efficient site design guidelines	Assess, Plan & Govern	4	
6.6	Incentivize renewable energy and energy efficiency projects	Assess, Plan & Govern	5	
6.7	Adopt land-use policies that support or incentivize farmers' markets, community gardens and urban and rural agriculture	Assess, Plan & Govern	4	
Resource-efficient Transportation			**52**	
6.8	Adopt green parking lot standards	Assess, Plan & Govern	4	
6.9	Adopt a complete streets policy	Assess, Plan & Govern	4	

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
6.10	Implement strategies that support bicycling and walking	Implement	10	
6.11	Install electric-vehicle infrastructure	Implement	8	
6.12	Implement strategies that increase public transit ridership and alternative transport modes	Implement	10	
6.13	Implement a Safe Routes to School program	Implement	3	
6.14	Implement traffic calming measures	Implement	5	
6.15	Adopt and enforce an anti-idling ordinance	Assess, Plan & Govern	3	
6.16	Implement transportation technology solutions	Implement	5	
Natural Resource and Open Space Preservation			**17**	
6.17	Develop a natural resource inventory	Assess, Plan & Govern	5	
6.18	Develop a local forestry or tree planting project or program	Implement	6	
6.19	Preserve natural areas through zoning or other regulations	Assess, Plan & Govern	6	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Develop a Plan

6.1 DEVELOP AND ADOPT A COMPREHENSIVE PLAN WITH SUSTAINABILITY ELEMENTS

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 9

A. Why is this action important?

Comprehensive plans or master plans provide a vision, goals and strategies for how a community wants to grow over a 10 to 20 year period. Almost 70% of the state's cities, towns, and villages have a comprehensive plan[1] . A resource-efficient comprehensive plan should address how to sustain a community through thoughtful planning and decision making that balances the three "E's": environment, economy, and equity. Sustainability elements, including both greenhouse gas emission

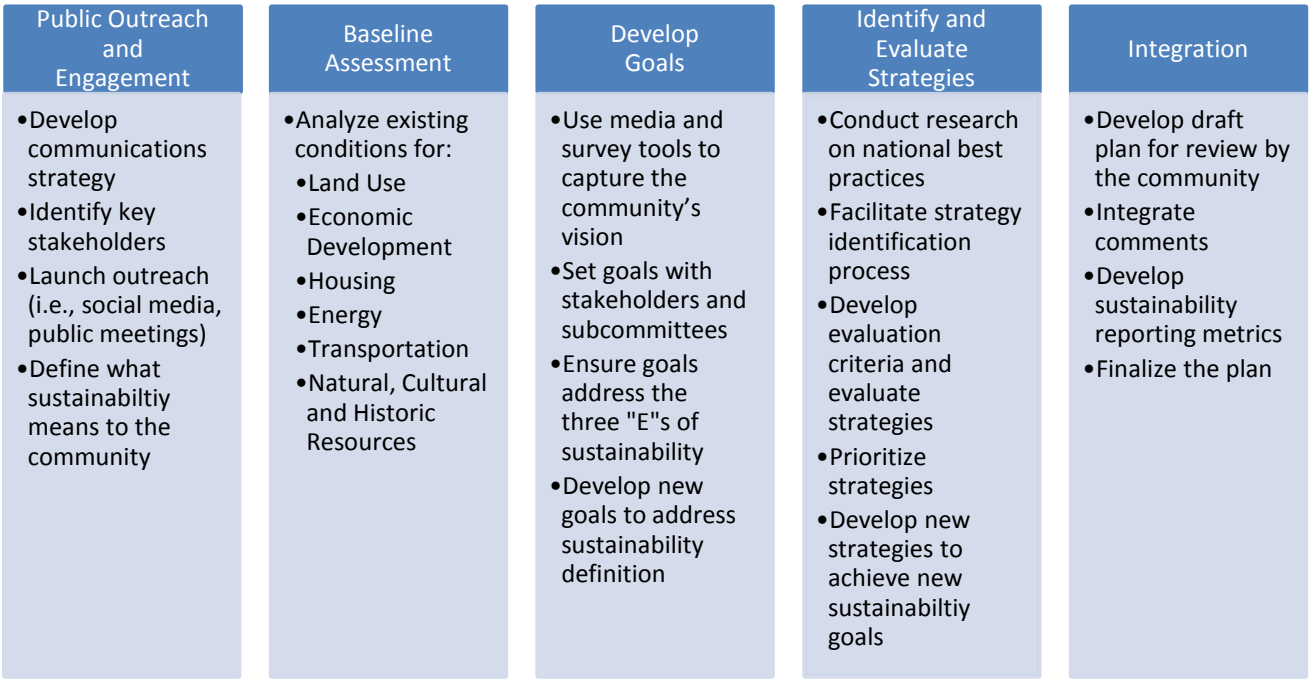
[1] NYS Legislative Commission on Rural Resources, Survey of Land Use Planning & Regulations in NYS (2008).

reductions and community resilience, can be incorporated in the development of a new or updated comprehensive plan or local governments can adopt a sustainability amendment to their existing plans.

B. How to implement this action

Local governments are responsible for planning in a number of areas, including housing, transportation, water, open space, waste management, energy, disaster preparedness, and long - term sustainability and resilience. In New York State these planning efforts can be combined into a comprehensive plan that can guide future development through zoning regulations and steer local government investments. Incorporating the principles of sustainability and smart growth, and accounting for a changing climate will save time and money, ensure alignment around the planned actions, and create a resource-efficient vision for the future. If a local government is creating a new or updated comprehensive plan, the steps in Figure 1 can be followed to incorporate sustainability into the process. As with all planning processes, public outreach and engagement are essential throughout the creation of the plan.

Figure 1: Planning Process for a Resource-efficient Comprehensive Plan



Some local governments are embracing sustainability after their comprehensive plans are completed. Instead of rewriting the entire plan, many local governments adopt a sustainability element or adopt other plans as amendments to their full comprehensive plans. The planning process for an amendment to a comprehensive plan typically mirrors the process outlined above, although the scope will be focused on the particular amendment topic, such as a bike and pedestrian plan, and the timeline and level of effort will be shorter then with an update to a comprehensive plan. While creating an amendment doesn't ensure that the sustainability principles are incorporated throughout the entire plan, this approach does show commitment to principles of sustainability. Either way, credit can be received for incorporating sustainability into these broader plans.

Most comprehensive plans have traditionally covered the essential topics of land use and transportation, housing, and economic development with some basic discussion of environmental issues and other locally relevant priority topics. A resource-efficient comprehensive plan not only includes these elements, but also covers the following topics related to sustainability:

- Promote alternative transportation options (bicycle, pedestrian, public transit)
- Promote smart growth principles in land-use policies
- Conserve natural areas
- Protect public health and safety
- Foster green economic development
- Promote energy efficiency and renewable energy production
- Ensure the efficient use of natural resources
- Remedy environmental justice issues
- Promote development or conservation of local food systems
- Strive for social equity in housing, schools, green space and food and transportation options
- Minimize solid waste and promote recycling and composting
- Protect drinking water sources
- Minimize stormwater run-off
- Promote climate adaptation and resilience

CSCs are encouraged to contact the New York State Department of State (DOS) Division of Local Services for training, technical assistance and legal guidance on comprehensive planning (http://www.dos.ny.gov/lg/index.html) and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

If the local government is starting from the beginning with its comprehensive planning process, it will take about eighteen months to complete the plan. Communities often hire a consultant to undertake a comprehensive plan. Project costs can range from tens to hundreds of thousands of dollars to facilitate a full comprehensive planning process. An amendment to an existing comprehensive plan is likely to cost less than a new plan and in some cases may be done by local planning staff.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can complete a resource-efficient comprehensive plan. Town boards, village boards, and city or common councils authorize the development of comprehensive plans. Most communities appoint a comprehensive plan committee to coordinate the development of the plan and work with a planning consultant who will facilitate the planning process. If your community has a planning department, it would typically be involved as well. Other municipal committees, such as conservation advisory councils or environmental commissions, can be included to help gather data or provide recommendations on natural resource issues.

E. How to obtain points for this action

Points are obtained by completing and adopting a resource-efficient comprehensive plan that addresses the following required and optional elements. The required elements are high priority

elements that should be included in any comprehensive plan, and are therefore not eligible for points in this action.

If integrating with a new comprehensive planning effort, any of the following elements will be considered "incorporated" and therefore eligible for points if goals, strategies, and reporting metrics have been identified specifically for that element. If the local government is developing a new element to attach as an addendum to a previously approved comprehensive plan, the element must include goals, strategies, and reporting metrics specific to the element and the adoption of the element must be formalized and documented.

A resource-efficient comprehensive plan should the following elements:	Possible Points
• Promote alternative transportation options (Bicycle, Pedestrian, public transit)	Required
• Promote smart growth principles in land-use policies	Required
• Conserve natural areas	Required
• Protect public health and safety	Required
• Foster green economic development	1
• Promote energy efficiency and renewable energy production	1
• Protect the resource-efficient use of natural resources	1
• Remedy environmental justice concerns	1
• Promote development or conservation of local food systems	1
• Strive for social equity in housing, schools, green space and food and transportation options	1
• Minimize solid waste and promote recycling and composting	1
• Protect drinking water sources	1
• Minimize stormwater runoff	1
• Promote climate adaptation and resilience	1

F. What to submit

For new or updated comprehensive plans, submit the following:

- A copy of the approved comprehensive plan with sustainability elements, adopted within ten years prior to the application date
- A copy of the meeting minutes where the plan was formally approved by the local governing body
- A memorandum outlining how sustainability was incorporated into the plan

For addendums to previously approved plans, submit the following:

- A copy of the approved elements
- A copy of the meeting minutes where the elements were formally approved by the local governing body as addendums to the existing comprehensive plan

G. Links to additional resources or best practices

- Albany, NY - 2030 Plan: http://albany2030.org/

- Ithaca, NY - Comprehensive Plan: http://www.ci.ithaca.ny.us/values/sustainability/comprehensive-plan.cfm
- Southampton, NY – Sustainability Element Update to the Comprehensive Plan: http://www.southamptontownny.gov/content/760/762/1122/1674/7185/default.aspx
- Buffalo, NY – Comprehensive Plan: http://www.ci.buffalo.ny.us/files/1_2_1/mayor/cob_comprehensive_plan/index.html
- American Planning Association, Integrating Sustainability Into the Comprehensive Plan: http://www.planning.org/pas/quicknotes/pdf/QN33.pdf
- Church, D., and C. Traub. 2002. A Practical Guide to Comprehensive Planning, 2nd edition. New York Planning Federation. Troy, N.Y. www.nypf.org
- McElfish, J. 2004. Nature-Friendly Ordinances. Environmental Law Institute, Washington, D.C. Available for purchase at www.elistore.org.
- New York State Department of State. 1998. Creating the Community You Want: Municipal Options for Land Use Control. James A. Coon Local Government Technical Series. New York State Department of State. Albany, N.Y.
- New York State Department of State. 2004. Guide to Planning and Zoning Laws of New York State. James A. Coon Local Government Technical Series. New York State Department of State. Albany, N.Y. www.dos.state.ny.us/lgss/
- Nolon, J. 2002. Well Grounded: Using Local Land Use Authority to Achieve Smart Growth. Environmental Law Institute, Washington, D.C.
- Van Tine, J. [ed.] 2003. Local Environmental Strategies. Starting Ground Series. Pace University Land Use Law Center. White Plains, N.Y. www.law.pace.edu/landuse

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Land Use and Building Codes

6.2 INCORPORATE SMARTH GROWTH PRINCIPLES INTO LAND-USE POLICIES AND REGULATIONS

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 8

A. Why is this action important?

Most cities and counties have use-based zoning codes that segregate otherwise complementary residential, office, and retail (mixed) uses thereby encouraging a car-centric system of development. By updating local zoning and policies, local governments can encourage smart growth by promoting

transit oriented development, compact walkable communities, infill development, and other resource-efficient land-use practices. Smart growth principles applied to zoning can also help protect important open space and natural areas, preserving ecological functions such as stormwater management and flood mitigation in addition to enhancing recreation opportunities.

B. How to implement this action

Local governments can incorporate smart growth principles into their land-use policies by comprehensively updating the local zoning, or through amendments or policies that promote smart growth. Following a specific approach such as form-based codes, which place a primary emphasis on building type, dimensions, parking location and façade features, and less emphasis on uses, is one method of incorporating smart growth into local zoning.

Often, a comprehensive update to local zoning takes place concurrently or subsequent to an update to the community's comprehensive plan, but it is not necessary to update the comprehensive plan to incorporate smart growth principles into zoning. It is possible to incorporate smart growth principles into local land-use policies through a complementary planning process, such as a local waterfront revitalization plan, or to incorporate the principles into the project review process, such as at the site plan review stage.

Local governments can follow the key steps below to implement this action:

- Review existing zoning codes and policies and identify elements that support smart growth, and elements which inhibit smart growth
- Determine the most suitable approach for updating local land-use policies, either through amendments , a comprehensive zoning update, new policies, or changes to the project review process
- Draft new elements or policies to promote smart growth
- Gather public input on the new elements or policies
- Adopt the new zoning, policies, or processes

Local governments should include provisions in the updated zoning or policies which address the following smart growth principles:[2]

- Mix land uses
- Promote compact building design and cluster development
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and important natural areas, including floodplains, source water recharge areas and watersheds
- Strengthen and direct development toward existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair and cost effective
- Encourage community and stakeholder collaboration in development decisions

[2] Smart Growth Network, Smart Growth Principles: http://www.smartgrowth.org/why.php

The New York State Smart Growth Public Infrastructure Policy Act provides similar smart growth criteria that can also be incorporated into local land-use regulations (http://public.leginfo.state.ny.us/lawsseaf.cgi?querytype=laws+&querydata=@slenv0a6+&list=law+&browser=browser+&token=35281392+&target=view) .

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on smart growth (http://www.dos.ny.gov/lg/index.html)and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

The timing, costs, and resource needs depend on the extent to which the zoning must be updated to incorporate smart growth principles. For a comprehensive update to local zoning, communities might consider hiring a consultant and combining the zoning update with an update to the community's comprehensive plan, if applicable. For communities which only need to update portions of the zoning code, this could be addressed with local government staff and planning committee or other external advisors.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

The planning department typically is responsible for local planning and zoning. Communities that do not have their own planning departments may have to rely on a planning board or the county planning department to provide local planning and zoning guidance. Local government committees, such as CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

Local governments can earn points for this action by demonstrating that the following smart growth principles have been incorporated into local zoning, land-use policies, or processes.

	Possible Points
• Mix land uses	1
• Promote compact building design and cluster development	1
• Diversity of housing opportunities and choices	1
• Walkable neighborhoods	1
• Foster distinctive, attractive communities with a strong sense of place	1
• Preserve open space, farmland, natural beauty, and important natural areas	1
• Strengthen and direct development toward existing community centers, hamlets or urban areas	1
• Promote density that facilitates non-car transportation options	1

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

Local governments should submit a link or copy of the updated zoning or associated policies and an explanation of how the zoning meets the defined smart growth principles. The zoning may have been updated at any time prior to the application date to be eligible for points.

G. Links to additional resources or best practices

- Smart Growth Online: http://www.smartgrowth.org/
- EPA Smart Growth Guidance and Best Practices: http://www.epa.gov/smartgrowth/codeexamples.htm
- New York State Smart Growth Public Infrastructure Policy Act: http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=@SLENV0A6+&LIST=LAW+&BROWSER=BROWSER+&TOKEN=06349431+&TARGET=VIEW
- Form-Based Code Institute Sample Codes: http://formbasedcodes.org/sample-codes-search.php
- Smart Code Central: http://www.smartcodecentral.org/
- Tompkins County pedestrian neighborhood zone model ordinance: http://community-that-works.org/
- Floating zone model ordinance: http://www.usgbc.org/resources/neighborhood-development-floating-zone
- LEED ND Planners Guide and Model Ordinance: http://www.usgbc.org/resources/leed-nd-planners-guide-amp-model-ordinance

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.3 ADOPT A RENEWABLE ENERGY ORDINANCE

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4

A. Why is this action important?

Renewable energy, which includes wind, hydro, solar, geothermal and biomass, reduces greenhouse gas emissions by replacing fossil fuels in the generation of electricity. According to recent estimates, renewables have the potential to meet as much as 40 percent of energy needs in New York State by 2030.[3] Adopting ordinances that support development of renewable energy and remove barriers to installing renewable energy technologies will help local governments achieve the statewide goal and, ultimately, reduce greenhouse gas emissions.

B. How to implement this action

Renewable energy ordinances can serve various purposes from allowing installation to streamlining the permitting and approvals of generation systems. There are a number of steps which need to be followed in order to enact an ordinance. This is a collaborative effort and requires participation from the local government attorney, local government officials, citizens, the local legislators and the clerk

3 NYS Department of Environmental Conservation: http://www.dec.ny.gov/energy/40899.html

of the local legislative body. Before beginning the process, the following questions must be addressed:

1. Does the proposed subject matter of the local law fall within the general or specific grants of power contained in the Municipal Home Rule Law or elsewhere?
2. Are there restrictions, limitations or prohibitions which would militate against the exercise of such power?
3. Is there overriding general law on the subject or has the state pre-empted the field?

As with any change in local laws and policies, please consult with the municipal or local government attorney for guidance on drafting and enacting the desired policy. CSCs are encouraged to consult with DOS's Office of General Counsel regarding renewable energy ordinances (http://www.dos.ny.gov/cnsl/counsel.htm) .

The process for adopting a solar permitting ordinance has been significantly simplified through the NY Sun Initiative Standard PV Permit for New York State Local Officials: http://ny-sun.ny.gov/Local-Community-Tools. Other model ordinances for wind energy, as provided below, can also be used to assist the drafting of a broader local ordinance encompassing wind and other renewable energy technologies. Pursuant to New York State Education Law, structural and electrical elements must be designed by a licensed design professional (e.g., architect, engineer).

C. Timeframe, project costs, and resource needs

Adopting a local ordinance is time consuming and requires participation and cooperation from a variety of stakeholders. Consult the local government attorney first to determine the timeframe and resources necessary to begin this process.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Local governments with legislative authority can draft and enact an ordinance allowing renewable energy facilities. Planning departments (or planning boards) and local government attorneys are the primary stakeholders responsible for this action after an ordinance is adopted.

E. How to obtain points for this action

Points are achieved by drafting and passing an ordinance or multiple ordinances for one or more renewable energy systems:

	Possible Points
• Adopt the New York State Unified Solar Permit: http://ny-sun.ny.gov/Local-Community-Tools	2
• Adopt wind-power siting ordinances for large wind energy conversion systems	1
• Adopt wind-power siting ordinances for small and very small wind energy conversion systems	1

Wind ordinances should be substantially equivalent to the relevant components of the Columbia Law School's Center for Climate Change Law's Model Municipal Wind Siting Ordinance (http://web.law.columbia.edu/climate-change/resources/model-ordinances/model-municipal-wind-siting-ordinance) or other appropriate model provided by the CSC program or other New York State program.

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

Any local enactment to supersede the state building code will require approval by the State Fire Prevention and Building Code Council (http://www.dos.ny.gov/dcea/code_council.html) .

F. What to submit

In order to obtain points for this action a local government must send an electronic copy or link that includes the language for the ordinance and demonstrates that it has been approved by the local governing body. Proof that the code provisions of the ordinance have been approved by the State Codes Council must also be provided. The ordinance may have been passed (or updated) at any time prior to the application date.

G. Links to additional resources or best practices

- NY Sun Initiative: http://ny-sun.ny.gov/Local-Community-Tools
- Model municipal wind siting ordinance (Columbia University): http://web.law.columbia.edu/climate-change/resources/model-ordinances/model-municipal-wind-siting-ordinance
- Model small-scale solar siting ordinance (Columbia University): http://web.law.columbia.edu/climate-change/resources/model-ordinances/model-small-scale-solar-siting-ordinance
- Massachusetts Model As-of-Right Zoning Bylaws:
  - Solar: http://www.mass.gov/eea/docs/doer/green-communities/grant-program/solar-model-bylaw-mar-2012.pdf
  - Wind: http://www.mass.gov/eea/docs/doer/green-communities/grant-program/wind-model-bylaw-mar-2012.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.4 ESTABLISH GREEN BUILDING CODES

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 6

A. Why is this action important?

Green building codes set a standard for all new construction and major modifications for buildings that can have a long-term effect on reducing energy use and greenhouse gas emissions in a community.

B. How to implement this action

Local governments should first review their existing codes and regulations and identify any requirements that might preclude or inhibit green building and energy efficiency. In addition, local

governments might consider forming a green codes task force of representatives with an interest and expertise in energy efficiency and building codes, to work on updating the codes. Local governments should review the New York Energy Conservation Construction Code of New York State (ECCCNYS 2010), ASHRAE 90.1, ASHRAE 189.1, UCC-IGCC 2012IECC, and other best practice resources to inform the code update process.

ECCCNYS 2010 addresses the design and construction of energy-efficient building envelopes and the installation of energy-efficient mechanical, lighting and power systems through requirements emphasizing performance[4]. Local governments may adopt their own energy conservation requirements after notifying the state, but these requirements must be no less restrictive than the current ECCCNYS. All proposed revisions to local building codes should be reviewed by the Department of State Division of Building Standards and Codes.

Care should be taken to ensure that green building codes provide the flexibility to account for the challenges inherent in upgrading existing buildings and, in particular, historic structures.

Any local enactment to supersede the state building code will require approval by the State Fire Prevention and Building Code Council (http://www.dos.ny.gov/dcea/code_council.html) .

C. Timeframe, project costs, and resource needs

Costs associated with developing new codes can vary from internal staff time to consultant time for review.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Local governments with legislative authority can draft and enact a revised building code. Building departments and local government attorneys are the primary officials responsible for this action, although local governments would benefit from involvement of external experts in the building field. Municipal committees, such as CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

Adopt a local green building ordinance substantially equivalent to the Columbia Law School's Center for Climate Change Law's Model Municipal Green Building Ordinance (http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Resources/Model-Ordinances/Model-Green-Building/Model%20Municipal%20Green%20Building%20Ordinance_wcommentary.pdf) covering both new construction and major modifications.

	Possible Points
• Government owned buildings	1
• Commercial buildings	2
• High-rise multi-family residential buildings	1
• One and two-family dwellings	1
• Low-rise multi-family residential dwellings	1

4 NY Department of State, Division of Code Enforcement and Administration: http://www.dos.ny.gov/DCEA/energycode_code.html

F. What to submit

In order to obtain points for this action, a local government must submit an electronic copy or link to the green building code as adopted within the last five years. Proof that the proposed code change was reviewed and approved by the State Code Council must also be provided.

G. Links to additional resources or best practices

- ECCCNYS 2010: http://www.dos.ny.gov/dcea/energycode_code.html
- ECCCNYS 2010 Overview Presentation: http://www.preservenys.org/energyworkshops/wp-content/uploads/2012/05/Pres_JHill4_17.pdf
- Model municipal green building ordinance (Columbia University): http://web.law.columbia.edu/climate-change/resources/model-ordinances/model-municipal-green-building-ordinance
- Urban Green Council NYC Green Codes Task Force: http://www.urbangreencouncil.org/GreenCodes
- Babylon Green Building Certification Code: http://ecode360.com/6806042?highlight=green building,buildings,building#6806042
- Greenburgh Home Energy Conservation Requirements: http://www.greenburghny.com/cit-e-access/webpage.cfm?tid=10&tpid=1748
- EPA, Smart Growth and Sustainable Preservation of Existing and Historic Buildings: http://www.epa.gov/dced/topics/historic_pres.htm

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.5 CREATE RESOURCE-EFFICIENT SITE DESIGN GUIDELINES

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 4

A. Why is this action important?

Resource-efficient site design guidelines can help to ensure that communities are effectively managing stormwater, reducing the urban heat-island effect, adapting the infrastructure to changing climate conditions, improving neighborhood environments, increasing economic development, and minimizing the use of natural resources. Site guidelines can help improve the quality of design for new development and also streamline the site design review process, when developers have clear guidelines of the design priorities and vision for the community.

B. How to implement this action

Local governments may wish to develop resource-efficient site design guidelines as a standalone effort, or it might be part of a process to update a comprehensive plan, or perhaps an outcome of a

comprehensive plan update. The goal of the guidelines is to present the community's vision and design priorities to communicate to developers and streamline the development process.

The New York State Legislature provides authority for use of design standards and guidelines for aesthetic and other purposes. Towns can enact aesthetic and other related regulations pursuant to the New York State Municipal Home Rule Law § 10(1)(ii)(a)(11), which states that a municipality may adopt local laws for the "protection and enhancement of its physical and visual environment." This provides municipalities with the flexibility to establish a variety of measures for new development projects such as requiring the management of stormwater onsite, the upgrading of old infrastructure to meet changing conditions or to control private property appearance. Municipalities may also enact such measures under section 96-a of the New York State General Municipal Law.

Generally, aesthetics are considered an aspect of the public welfare under the police power, and aesthetics are proper considerations for subdivision approval, use and area variances, site plans, and special use permits. The use of design guidelines, therefore, is well grounded in statute and case law.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on site design (http://www.dos.ny.gov/lg/index.html).

C. Timeframe, project costs, and resource needs

Drafting resource-efficient site design guidelines could take six to nine months, depending on the level of staff time dedicated to the project and the level of detail desired in the documentation. The costs for the effort are primarily staff time. Local governments may also seek to engage other local experts on committees to support the drafting of the guidelines.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Local governments with legislative authority can draft and enact design standards or guidelines. Planning departments (or planning boards) and local government attorneys are typically responsible for this action. Municipal committees, such as CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

Points are achieved by drafting and passing resource-efficient design guidelines. The guidelines must include the following topics, to be eligible for points:

	Possible Points
• Vegetation	1
• Hydrology and Soils	1
• Materials in Site and Landscape Design	1
• Site Disturbance	1

F. What to submit

Local governments should submit an electronic copy or website link of the design guidelines which have been developed within the last ten years to receive points for this action.

G. Links to additional resources or best practices

- New York State Department of State training: http://www.dos.ny.gov/lg/lut/courses.html
- The American Society of Landscape Architect's Sustainable Sites Initiative: http://www.sustainablesites.org/
- New York, NY, Sustainable Urban Site Design Manual: http://www.nyc.gov/html/ddc/downloads/pdf/ddc_sd-sitedesignmanual.pdf
- Town of Warwick, NY Design Guidelines: http://www.townofwarwick.org/departments/compplan_docs/design_guidelines.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.6 INCENTIVIZE RENEWABLE ENERGY AND ENERGY EFFICIENCY PROJECTS

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

Offering incentives to residents and businesses can help to reduce, and in some cases almost eliminate, the implementation costs of renewable energy systems and energy efficiency projects.

B. How to implement this action

There are a number of incentives that can be offered to encourage renewable energy installation and energy efficiency projects. The following steps can help the local government must first determine where to begin:

- What are the goals for incentivizing renewable energy installations and/or energy efficiency projects?
- Is the focus on renewable energy or energy efficiency? Or both?
- Are the incentives going to be offered to residents? Businesses? Or both?
- What financial and human resources does the local government have to implement and manage the incentives it would like to offer?
- Are there legal limitations in New York State to implementing the types of incentives that the local government would like to offer?

These questions will help to determine the type(s) of incentives that the local government should implement to encourage renewable energy and energy efficiency projects.

C. Timeframe, project costs, and resource needs

The local government should consider hiring a consultant to develop the incentives program and consult the local government attorney to determine the appropriate legal course of action to implement it.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action. Depending on the type of incentive, the primary departments that are responsible for implementing this action would be the planning department, planning board, legislative body, and the local government attorney.

E. How to obtain points for this action

Adopt renewable energy or energy efficiency incentive(s) program.

F. What to submit

Local governments must submit documentation outlining the incentive program(s) including the following:

- The process that was undertaken to adopt the program
- Who is managing the program
- Eligibility
- Success to-date (where applicable)

The program must have been implemented within the last five years and be actively managed.

G. Links to additional resources or best practices

- Town of Babylon, NY, Long Island Green Homes Program: http://ligreenhomes.com/
- Town of Riverhead, NY Energy Conservation Device Permitting Discount: http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=NY42F&State=federal&currentpageid=1&ee=0&re=0
- Local Option: Solar Sales Tax Exemption: http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=NY100F&State=federal&currentpageid=1&ee=0&re=0

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.7 ADOPT LAND-USE POLICIES THAT SUPPORT OR INCENTIVIZE FARMERS' MARKETS, COMMUNITY GARDENS, AND URBAN AND RURAL AGRICULTURE

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4

A. Why is this action important?

Local governments have begun to take an interest in agriculture as a way to address food security, promote public health, support economic and community development, and to improve the urban environment. Increasing the availability of local foods is also an important strategy being used to reduce greenhouse gas emissions from the long distance transport of food into a region. Rural communities can also promote and preserve agricultural areas through agriculture plans or districts or land preservation.

B. How to implement this action[5]

According to the March 2010 issue of *Zoning Practice,* published by the American Planning Association, "In zoning, urban agriculture can be treated either as a district or as a use category." Local zoning regulations commonly permit a wide range of agricultural activities, including raising crops and animals, in designated agricultural districts in rural areas or on the urban fringe. *Zoning Practice* advises that urban agriculture can also be treated as a use or set of uses that are permitted, conditional, or forbidden, depending on the district. Both of these approaches have benefits, but it depends on the needs and goals of the local government to determine which is the most useful to accomplish local goals.

Local governments with urban areas investigating changes to zoning ordinance or policies should consider several questions:

- What are the possible urban agriculture activities in our community?
- What can be allowed in a widespread way with little controversy and what is controversial?
- What can be allowed, but controlled?
- What can be allowed, but only in certain places?
- Are there some places where specific activities should be encouraged?
- Who are the likely participants and how can positive relationships be fostered?

Rural communities may choose to focus on preserving local agricultural areas through agriculture plans, agriculture districts, or partnerships with land trusts to buy agriculture easements.

CSCs are encouraged to consult with DOS's Office of General Counsel regarding policies to incentivize farmers' markets, community gardens, and urban and rural agriculture (http://www.dos.ny.gov/cnsl/counsel.htm),

C. Timeframe, project costs, and resource needs

This action can be implemented with assistance from a professional planner on staff. For many communities, changes in zoning ordinances and policies can take up to a year to conduct background research, review existing ordinance language, draft new language, consult with a local government attorney and pass new or revised legislation. Consultants and Cooperative Extensions are very helpful resources in crafting the language and determining the most appropriate policy changes to accomplish local goals.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is relevant to any local government. The planning department (or planning board) and local government attorney are the primary officials responsible developing draft language for adoption and for implementing the new policy. The town board, village board, or city or common council will be responsible for adopting new regulations. County governments may develop incentives or assist local governments in adopting these policies.

5 Information in this section was taken from an excerpt of the March 2010 issue of *Zoning Practice*, published by the American Planning Association: http://www.cityfarmer.info/2010/03/09/zoning-for-urban-agriculture/

E. How to obtain points for this action

To obtain points for this action, the local government must update the local zoning ordinance or adopt new policies that incentivize, promote, or remove barriers to local farmers' markets, the creation of community gardens, and urban and rural agricultural practices.

	Possible Points
• Local farmers' markets or farm stands	1
• Community gardens	1
• Urban agriculture	1
• Rural agriculture	1

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

The revised zoning ordinance or new policy must be submitted electronically to receive points for this action. Local governments must submit a memorandum highlighting the specific sections of the zoning or ordinance that support or incentivize farmers' markets, community gardens, and urban or rural agriculture.

G. Links to additional resources or best practices

- NY Department of Agriculture and Markets: http://www.agriculture.ny.gov/
- American Planning Association, Zoning for Urban Agriculture: http://www.planning.org/zoningpractice/2010/pdf/mar.pdf
- Sustainable Cities Institute, Promoting Urban Agriculture: Zoning: http://www.sustainablecitiesinstitute.org/view/page.basic/report/feature.report/Report_Zoning_Urb_Ag
- New York State Codes, Right to Farm: http://codes.lp.findlaw.com/nycode/AGM/25-AA/308
- GrowNYC: http://www.grownyc.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Resource-efficient Transportation

6.8 ADOPT GREEN PARKING LOT STANDARDS

Action pathway phase: Assess, Plan Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4

A. Why is this action important?

Parking lots, comprised mostly of pavement, have been a dominant feature of our communities to accommodate the automobile. Green parking lot standards are designed to reduce the environmental impacts of these sites on our communities by incorporating a variety of features, including reduced impervious surface, green infrastructure techniques, and alternative parking surface materials.

B. How to implement this action

By applying innovative approaches to planning and design, communities can mitigate the impacts of parking lots. Green parking lot standards are implemented by updating the local zoning code or through the adoption of an ordinance. There are a variety of techniques that can be incorporated into local zoning or policies to create green parking lot standards, these best management practices include the following:

- **Reduce minimum parking requirements** – this can be based on project location or population and allows the local government to encourage projects that are located adjacent to public transit to reduce the demand for parking spaces or implementation of transportation demand management programs which encourage residents to use alternative modes of transportation (e.g., transit, carpooling, biking).
- **Adopt parking maximums and/or area wide parking restrictions –** this technique limits the number of parking spaces in a development or across a larger area (i.e., downtown or a transit oriented development) which can help to maintain the marketability of sites in a district.
- **Reduce stall dimensions –** creating more compact parking spaces and accurate stall size requirements that fit the growing trend in the number of smaller cars on the road.
- **In-lieu parking fees** – an option fee is paid by developers in place of meeting minimum parking requirements. The fees paid by developers are often allocated to local government funds that are established to mitigate traffic impacts or used to provide existing government off-site parking to the tenants and visitors of the new development.
- **Incorporate stormwater management on site** – green infrastructure techniques manage stormwater on site through the use of bio-swales, vegetated buffer strips and bioretention areas.
- **Install colored curb zone markings** – street curb striping or painting is used in drop-off and pick-up zones to clarify parking and other curb use rules. They are generally used to address competing needs, assist in moving people and goods more efficiently, support the vitality of business districts, and create livable neighborhoods. In business districts that include blocks with mixed-use buildings containing residential units, they provide for more efficient transit operations, commercial freight deliveries, and short-term parking flexibility for retail establishments.
- **Install green loading zones** – to encourage the use of zero-emissions vehicles and idle-free solutions. Creation of dedicated zero-emissions curbside loading zone spaces encourages freight and logistics companies to shift toward zero-emissions vehicles. In addition to the health and environmental benefits, green loading zones can produce additional benefits by developing increased roadway capacity, supporting electric-vehicle deployment and usage, and enabling better management, monitoring, and potential monetization of curbside pavement. Green loading zones also provide economic development support for the growing electric-vehicle and related industries in New York State.
- **Use alternative parking surface materials** – a variety of paving materials have been developed to mitigate the environmental impacts of parking lots. Permeable and semi-permeable alternative pavers such as bricks, gravel, pervious concrete, and turf blocks allow infiltration of stormwater directly into the ground. Using recycled materials, such as reprocessed asphalt or crushed glass, is also an alternative for both environmental and economic reasons.

- **Minimize land cleared for construction** – conserve as much of the vegetation and habitat on site and use native trees and shrubs that require less irrigation.
- **Promote shared parking** – share parking lots with complementary users that need the lot at different times.
- **Increase tree plantings in parking areas** – to support stormwater management and provide shading to reduce the urban heat-island effect.

As with any local zoning ordinance modification, please consult with the local government attorney to determine the appropriate language and process for incorporating these standards. CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on green parking lot standards (http://www.dos.ny.gov/lg/index.html) and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

This action can be implemented with assistance from a professional planner on staff. For many local governments, changes in zoning ordinances can take up to a year to conduct background research, review existing ordinance language, draft new language, consult with a local government attorney and pass new or revised legislation. Consultants are very helpful resources in crafting the language and determining the most appropriate changes to accomplish local goals.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Local governments with legislative authority can draft and adopt green parking lot standards. Planning departments (or planning/zoning boards) and local government attorneys are primarily responsible for ensuring the standards are met by applicants.

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

E. How to obtain points for this action

To obtain points for this action, the local government must update the local zoning code or adopt an ordinance to include green parking lot standards. Points are awarded based on the number of best management practices BMPs implemented.

	Possible Points
• Implement 1 green parking lot standard, as described above	1
• Implement 2 green parking lot standards, as described above	2
• Implement 3 green parking lot standards, as described above	3
• Implement 4 or more green parking lot standards, as described above	4

To be eligible for points for this action, local governments are not required to incorporate the parking standards into their zoning or comprehensive plans; however, they are encouraged to do so to avoid a New York Civil Practice Laws and Rules Article 78 challenge.

F. What to submit

A zoning code or ordinance revision that adopts one or more green parking lot standards and was adopted within the past three years must be submitted to receive points for this action.

G. Links to additional resources or best practices

- DEC, Code and Ordinance Worksheet for Development Rules in New York State: http://www.dec.ny.gov/docs/remediation_hudson_pdf/cownys.pdf
- U.S. EPA, Green Parking Lot Resource Guide: http://www.streamteamok.net/Doc_link/Green%20Parking%20Lot%20Guide%20(final).PDF
- New York, NY, Commercial and Community Facility Parking Lot Zoning – Green Standards: http://www.nyc.gov/html/dcp/html/parking_lots/index.shtml
- New York, NY, Green Loading Zones: The Emergence of Zero-Emission Urban Delivery and the NYC Opportunity: http://barrettobay.com/wp-content/uploads/2013/12/Green.Loading.Zones_.NYC_.2013.pdf
- Victoria Transport Policy Institute, Parking Solutions: http://www.vtpi.org/tdm/tdm72.htm
- San Francisco Municipal Transportation Agency, Curb Colors: http://www.sfmta.com/getting-around/parking/curb-colors
- WXY architecture + planning, Policy and Planning for the Last Mile: http://www.utrc2.org/sites/default/files/Adam-Lubinsk-Policy-and-Planning-for-last-mile.pdf
- Automobile, Current Trends in Small Cars-Small is Big: http://www.automobilemag.com/features/news/1004_current_trends_in_small_cars/viewall.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.9 ADOPT A COMPLETE STREETS POLICY

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 4

A. Why is this action important?

Streets are the main arteries of a community, moving people, goods and services from one place to another. A Complete Streets approach to designing our roads incorporates safety, livability, and a place for all users – bicyclists, public transportation, pedestrians, and automobiles. Complete Streets design can include more vegetation to provide shade and a buffer from traffic, and it can include green infrastructure to better manage stormwater. As stated in the New York State Complete Streets Act of 2011, "Complete Streets will contribute to a 'cleaner, greener transportation system"

and "more citizens will achieve the health benefits associated with active forms of transportation while traffic congestion and auto related air pollution will be reduced.[6]"

B. How to implement this action

According to the National Complete Streets Coalition, "Complete streets can be achieved through a variety of policies: ordinances and resolutions; rewrites of design manuals; inclusion in comprehensive plans; internal memos from directors of transportation agencies; policies adopted by city and county councils; and executive orders from elected officials." The coalition assists local governments in developing Complete Streets policies by providing step-by-step guidance, including policy elements and model language. As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting a Complete Streets policy. CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on complete streets policies (http://www.dos.ny.gov/lg/index.html).

C. Timeframe, project costs, and resource needs

This action can be implemented with assistance from a professional planner. For many local governments, resolutions and policy changes can take up to a year to conduct background research, draft new language, consult with a local government attorney and enact. Consultants can be resources in crafting the language and determining the most appropriate changes to accomplish local goals.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Local governments with legislative authority can draft and adopt a Complete Streets policy. Planning departments (or planning boards) and local government attorneys are typically responsible for implementing this action. Municipal committees, such as the CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

To obtain points for this action, the local government must adopt a Complete Streets resolution or policy. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

Please submit an electronic copy or link of the Complete Streets policy that was adopted within the past five years to receive points for this action.

G. Links to additional resources or best practices

- New York State Complete Streets Act and sample resolutions or policies: https://www.dot.ny.gov/programs/completestreets
- Smart Growth America – National Complete Streets Coalition: http://www.smartgrowthamerica.org/complete-streets

6 NY State Department of Transportation, Complete Streets: https://www.dot.ny.gov/programs/completestreets

- Kingston Complete Streets Policy: http://www.kingston-ny.gov/content/120/2336/2344/default.aspx
- Buffalo Complete Streets Policy: http://www.ci.buffalo.ny.us/Home/CityServices/BicyclePedestrianAdvisoryBoard/CompleteStreets

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.10 IMPLEMENT STRATEGIES THAT SUPPORT BICYCLING AND WALKING

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 10

A. Why is this action important?

Biking is a low cost, carbon-free transportation option that helps to reduce greenhouse gas emissions and enhance the sustainability of communities.

B. How to implement this action

Local governments have a range of strategies they can implement to improve the infrastructure for cycling in their communities:

- Develop a bicycle and pedestrian master plan (or similar plan)
- Expand and improve bike paths and bike lanes
- Improve bike parking
- Improve bike signage
- Develop a bike share program

For communities that wish to improve the biking rates in their communities, they often begin the process by developing a bicycle (and pedestrian) plan. This can be a standalone plan or incorporated into another planning document, such as a comprehensive plan. Either way, this helps local governments to define their priorities and identify strategies most appropriate for their communities.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on strategies that support bicycling (http://www.dos.ny.gov/lg/index.html) and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

The timeframe and costs associated with these strategies depends on the strategy selected and the degree to which it is implemented in the community. Local governments may wish to partner with organizations or groups with complementary missions, which may help with developing a bicycle and pedestrian plan, and creating signage or sponsoring a bike share program, for example.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all local governments, although some of the strategies are more relevant to more densely populated communities. The department of transportation is most likely to have responsibility for the tasks associated with this action. However, in some cases these efforts might be undertaken by a county or regional council, with input from local government representatives. Local government staff are also encouraged to work with any relevant community committees, such as conservation advisory councils or biking advocacy groups.

E. How to obtain points for this action

Local governments can earn points for this action by implementing the strategies listed below:

	Possible Points
• Develop a bicycle/pedestrian master plan (or similar plan)	2
• Expand and improve bike paths and bike lanes	2
• Improve bike parking	1
• Improve bike signage	1
• Develop a bike share program	4

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

In order to achieve points for this action, local governments must submit documentation demonstrating which strategies have been implemented. Any plans, reports, photographs, program details, websites, or other materials that demonstrate the implementation of strategies will be eligible for points.

G. Links to additional resources or best practices

- DOT, Transportation Alternatives Program, https://www.dot.ny.gov/tap
- Victoria Transport Policy Institute, Transportation Demand Management Encyclopedia, Strategies to Make Cycling Convenient, Safe and Pleasant: http://www.vtpi.org/tdm/tdm93.htm
- Victoria Transport Policy Institute, Transportation Demand Management Encyclopedia, Strategies to Make Walking Convenient, Safe and Pleasant: http://www.vtpi.org/tdm/tdm92.htm
- Sample Bike Plans: http://www.bicyclinginfo.org/develop/sample-plans.cfm
- Poughkeepsie-Dutchess County Transportation Council Bicycle and Pedestrian Plan: http://www.co.dutchess.ny.us/countygov/departments/transportationcouncil/21810.htm
- Bike Sharing in the United States: State of the Practice and Guide to Implementation, September 2012: http://www.bicyclinginfo.org/promote/bikeshareintheus.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.11 INSTALL ELECTRIC-VEHICLE INFRASTRUCTURE

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 8

A. Why is this action important?

Electric vehicles can help increase energy security, improve fuel economy, lower fuel costs, and reduce greenhouse gas emissions.

B. How to implement this action

Installing electric-vehicle (EV) infrastructure takes careful planning and coordination. Based on a most recent feasibility study conducted for the City of Albany, NY, several initial steps must be taken to plan for EVs in your community:

1. Assess current opportunities to support EV infrastructure in your community and throughout the region
2. Identify criteria for strategic placement of charging infrastructure
3. Identify policies and regulations for EV-friendly zoning, infrastructure, and technology
4. Conduct a thorough review of best practices and their applicability to your local government
5. Determine recommendations for optimal locations for siting charging stations
6. Develop recommendations on incorporating EVs into your local government fleet

Local governments throughout New York State have received funding through NYSERDA, NYS Department of Transportation and the U.S. Department of Energy to install EV charging stations. Local governments should investigate funding options to support their EV planning efforts from these and other sources.

All electric-vehicle charging infrastructure installations must adhere to the National Electrical Code and State Building Code.

C. Timeframe, project costs, and resource needs

This action can take several years to implement, especially if a full feasibility study is conducted for the local government. The project costs can vary widely depending on whether a consultant is secured, the depth of the study, funding available to support the capital costs of the charging stations, and staff time needed to support this effort.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action. The planning department, planning board, or the department of public works are typically responsible.

E. How to obtain points for this action

Points are earned for installations of one or more electric vehicle charging stations by the municipality. The charging station must have been funded by the municipality (use of external funding is permitted) or located on property owned or managed by the municipality. The charging station must also be accessible to the public.

	Possible Points
• Install 1 electric vehicle charging station	2
• Install 2 electric vehicle charging stations	3
• Install 3 electric vehicle charging stations	4
• Install 4 electric vehicle charging stations	5
• Install 5 electric vehicle charging stations	6
• Install 6 electric vehicle charging stations	7
• Install 7 or more electric vehicle charging stations	8

F. What to submit

Local governments should submit the steps taken to install the EV charging station(s), including the funding source(s), stakeholders involved, an electronic copy of the feasibility study (if applicable), timeline for completion, and photos of the installed charging station(s).

G. Links to additional resources or best practices

- Albany, NY, Electric Vehicle Feasibility Study: http://www.afdc.energy.gov/fuels/electricity_benefits.html
- Albany, NY, Electric-Vehicle Readiness Checklist: http://www.albanysustainability.org/documents/Albany_EV_Final%20Plan.pdf
- Transportation and Climate Initiative of the Northeast, Electric Vehicle Documents: http://www.transportationandclimate.org/northeast-electric-vehicle-network-documents
- NYSERDA, Alternative Vehicle Program: http://www.nyserda.ny.gov/BusinessAreas/Energy-Innovation-and-Business-Development/Research-and-Development/Transportation/Alternative-Fuel-Vehicles.aspx
- U.S. Department of Energy, Alternative Fuels Data Center: http://www.afdc.energy.gov/fuels/electricity_benefits.html

H. Recertification requirements

During recertification, CSCs will be awarded half of the original number of points awarded for each station upon demonstration that the station(s) is still in operation. CSCs will be awarded additional points according to the schedule above for station(s) installed after the original certification.

6.12 IMPLEMENT STRATEGIES THAT INCREASE PUBLIC TRANSIT RIDERSHIP AND ALTERNATIVE TRANSPORT MODES

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 10

A. Why is this action important?

By increasing ridership, a community can maximize the benefits of public transportation, including reduced greenhouse gas emissions from single-occupancy vehicles, lower gasoline consumption,

reduced congestion, enhancement of personal mobility (especially those without a vehicle), and it provides jobs and other economic opportunities.

B. How to implement this action

There are a number of ways that local governments can implement strategies to increase the use of public transportation. Each of the strategies strives to reduce some of the barriers to transit ridership such as cost of public transit, distance a passenger needs to travel to access transit, shelter at the transit stop, access to bicycle and pedestrian facilities, and parking if the passenger is driving to a central spot to take transit into an urban area. Local governments should start this process by investigating the needs of the community. Who currently takes public transit? What types of public transportation is offered? Where are the routes? Are they serving the existing demand and need for public transportation?

After determining the need, local governments can use some of the following strategies to increase ridership:

- Develop shuttle system to trains
- Improve walkways, sidewalks and/or bikeways to trains and buses
- Create covered, secure bike racks
- Ensure adequate car parking near bus stops
- Encourage car sharing
- Provide incentives directly to riders or work with local employers to provide incentives to employees for using public transit
- Coordinate with a regional transit agency or neighboring community to expand access to public transit within the region

Although some of these strategies require capital investment, the local government should investigate which options will fit its needs and result in increased ridership. One size does not fit all – local governments should choose the strategies that fit the needs of their population.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on policies to promote transit ridership and use of alternative transportation (http://www.dos.ny.gov/lg/index.html) and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

Many of the strategies used to increase transit ridership require staff time to plan and capital investment to fund them; for example, constructing sidewalks and bus shelters and installing bike racks. Regional planning agencies and metropolitan planning organizations are great resources for data and conducting needs assessments. They may also be able to assist with regional coordination between neighboring communities. The timeframe to implement this action can be anywhere from six months to several years, depending on the costs and coordination required to implement specific strategies.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action. However the scale of this action will vary based on the population and location of the community. Departments of public works, transit agencies (where applicable), planning departments, and planning boards are typically responsible for this action.

E. How to obtain points for this action

A local government can implement any or all of the following strategies to achieve points for this action:

	Possible Points
• Develop shuttle system to trains	3
• Improve walkways, sidewalks and/or bikeways to trains and buses	2
• Create covered, secure bike racks	1
• Ensure adequate car parking near bus stops	1
• Encourage or promote a car-sharing program	1
• Provide transit incentives directly to riders or through local employers	1
• Coordinate with a regional transit agency or neighboring community to expand access to public transit within the region	1

F. What to submit

Local governments must submit documentation that the strategies have been implemented. Documentation can include shuttle website and schedules, funding source and photographs of upgraded sidewalks or bikeways, funding source and photographs of bike racks, specific incentives provided to riders, incentives provided to employees and the employer(s) that offer those incentives, tiered rate structure for transit fares, and any partnerships with regional transit agencies or neighboring communities. These strategies must be actively implemented at the time of submission.

G. Links to additional resources or best practices

- DOT, Transportation Alternatives Program, https://www.dot.ny.gov/tap
- DOT, Public Transportation: https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation
- Huntington, NY, Resident Hybrid/Alternative Fuel Vehicle Parking Fee Waiver: http://huntingtonny.gov/department_details.cfm?ID=19
- Victoria Policy Institute, Transportation Demand Management Encyclopedia, Public Transit Improvements: http://www.vtpi.org/tdm/tdm47.htm
- CarSharing.net: http://www.carsharing.net/where.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.13 IMPLEMENT A SAFE ROUTES TO SCHOOL PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Safe Routes to School programs work to encourage students to walk and bike to school through infrastructure upgrades and education. Implementing this action decreases congestion around schools, improves air quality, reduces greenhouse gas emissions, and increases the health and well-being of our children.

B. How to implement this action

The National Center for Safe Routes to School recommends the following steps to implementing a Safe Routes to School program:

1. Bring together the right people
2. Hold a kick off meeting and set a vision
3. Gather information and identify issues
4. Identify solutions
5. Make a plan
6. Implement the plan and get people moving
7. Evaluate, adjust and keep moving

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on Safe Route to School programs (http://www.dos.ny.gov/lg/index.html) and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

Safe Routes to School programs require funding and significant staff time to implement. Safe Routes to School funds may be available through the DOT's Transportation Alternatives Program (TAP).

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government/school district can implement this action. The school department, with assistance from the planning department, planning board, and department of public works, is usually responsible for implementation.

E. How to obtain points for this action

To obtain points for this action, a local government/school district must make a commitment to, and implement, a Safe Routes to School program for one or more of the schools in the community.

F. What to submit

Local governments should submit a website and other documents (including education materials) that outline the details associated with the program, including routes and safety features for students, stakeholders involved, funding source, any events and activities included in the program,

any metrics associated with successful implementation of the program. The program must be currently active.

G. Links to additional resources or best practices

- DOT, Safe Routes to School, https://www.dot.ny.gov/safe-routes-to-school
- DOT, Transportation Alternatives Program, https://www.dot.ny.gov/tap
- National Center for Safe Routes to School: http://www.saferoutesinfo.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.14 IMPLEMENT TRAFFIC CALMING MEASURES

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Implement
Eligibility timeline: Any time prior to the application date
Total possible points: 5

A. Why is this action important?

Traffic calming measures create and preserve a sense of place in a community and treat the street as a *part* of the community it is traveling through – not the governing feature. Slowing traffic down encourages bicycle and pedestrian use by increasing safety and improving the quality of life in an area, while keeping the traffic moving, and helps to manage stormwater through roadside vegetation. Some traffic calming measures like narrowing streets and adding vegetation can also help manage stormwater.

B. How to implement this action

The Project for Public Spaces encourages local governments to consider a number of issues before they implement specific traffic calming measures. Each traffic calming measure has its own unique applications, and they don't all fit every situation. Please consider the following questions before you get started:

- Do emergency and service vehicles use the area? Do school buses?
- Is there a problem with through traffic?
- What are the surrounding uses? Residential? Commercial? Retail? Cultural? Entertainment? Civic? Educational? Other?
- Who are the users? Are there many elderly or disabled people or children?
- What kinds of activities are going on in the vicinity or are planned to go on?
- Are there plans for improving the area? If so, how?
- What kinds of streets are being looked at? What is the ideal speed desired?
- Is transit service available? If so, where and what kind?
- Where is drainage needed?

Depending on the responses to these questions there are a variety of measures that can be implemented to calm traffic in your community[7]. Each of the following is defined and described in the Project for Public Spaces' Traffic Calming 101.

- Diagonal Parking (see note below)
- Changing One-Way Streets to Two-Way
- Widening Sidewalks/Narrowing Streets and Traffic Lanes
- Bulbs – Chokers – Neckdowns
- Chicanes
- Roundabouts
- Traffic Circles
- Raised Medians
- Tight Corner Curbs
- Diverters
- Road Humps, Speed Tables, and Cushions
- Rumble Strips and Other Surface Treatments

NOTE: DOT recommends the front-in diagonal parking technique if there is a median separating travel lanes. Without a median, front-in diagonal parking is unsafe, but back-in diagonal parking method is acceptable.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on traffic-calming measures (http://www.dos.ny.gov/lg/index.html)and the New York State Department of Transportation (DOT) for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

Traffic calming techniques can be implemented inexpensively and tailored to fit the needs of the specific circumstance in your jurisdiction. With some coordination, these measures can be implemented within a couple of weeks to months at little to no capital costs. Staff time (including some police department coordination as needed) will be necessary. For capital improvements projects (as described above), staff time and potentially consultant services will be needed to implement the measures.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action as long as the measures are on local roads. Departments of public works or transportation are typically responsible for this action.

E. How to obtain points for this action

Local governments need to implement at least one traffic calming measure to earn points for this action.

	Possible Points
• Implement 1 traffic calming measure	1
• Implement 2 traffic calming measures	2

[7] http://www.pps.org/reference/livememtraffic/#DIAGONAL%20PARKING

- Implement 3 traffic calming measures 3
- Implement 4 traffic calming measures 4
- Implement 5 traffic calming measures 5

F. What to submit

A local government must submit evidence that the traffic calming measures have been implemented, such as maps, plans, reports, or photographs. The measure(s) may have been implemented at any time to be eligible for points.

G. Links to additional resources or best practices

- DOT Highway Design Manual – Chapter 25 Traffic Calming: https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt_25.pdf
- Project for Public Spaces, *Traffic Calming Toolbox:* http://www.pps.org/reference/livememtraffic/
- Victoria Policy Institute, Transportation Demand Management Encyclopedia, Traffic Calming: http://www.vtpi.org/tdm/tdm4.htm

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.15 ADOPT AND ENFORCE AN ANTI-IDLING ORDINANCE

Action pathway phase: Assess, Plan, and Govern
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Engine idling is a common problem around schools, rest stops and retail locations. In addition to wasting fuel and polluting the local environment, it contributes to the transportation sector's portion of greenhouse gas emissions. Adopting anti-idling policies requires that drivers shut off their engines to reduce harmful emissions and improve air quality in public places.

B. How to implement this action

Local governments have the authority to restrict idling within their borders and to set more stringent standards than state and federal governments. Local governments can establish anti-idling policies governing local government vehicles or laws governing all vehicles, and can institute anti-idling programs that include public education and law enforcement.

Enforcement and public awareness are crucial to the success of anti-idling laws. The Center for Clean Air Policy has identified methods to encourage compliance with anti-idling laws through public outreach and enforcement:

- Public education – including signage and literature that inform the public about the law and about the environmental damage, waste and health effect of emissions caused by idling

- Penalties – such as fines, for idling infractions
- Enforcement – especially targeted in areas or locations where idling is common[8]

As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Timeframe, project costs, and resource needs

Anti-idling policies can be implemented within a year with local government staff time and resources. Staff time is needed to coordinate the language of the policy, determine the enforcement mechanisms, and launch a public outreach and education campaign. Funding may be available through the state and U.S. EPA to support signage and education materials, but there are a number of resources available that local governments can tailor for their own needs. For anti-idling policies that are actively enforced and involve fines, the revenue from the fines could cover the costs of the enforcement activities.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement an anti-idling ordinance. The planning department, planning board, health department, and department of public works are typically responsible for this action.

E. How to obtain points for this action

Draft, enact, and enforce an anti-idling ordinance and launch a public education campaign.

	Possible Points
• Adopt an anti-idling ordinance	1
• Enforce anti-idling ordinance	2

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

To earn points for this action, a local government must submit the anti-idling ordinance that was passed, photographs of the signage, electronic copies of the education materials or other outreach conducted on the ordinance. To receive full points, local governments must also demonstrate how the ordinance is actively being enforced. The law may have been passed at any time to be eligible for points.

G. Links to additional resources or best practices

- Westchester County, NY, Anti-Idling Ordinance: http://www.westchesterlegislators.com/LocalLaws/2008LocalLaws/15%20Idling%20Times%20Local%20Law.pdf
- State of New York Heavy Duty Vehicle Idling Laws: http://www.dec.ny.gov/chemical/8585.html
- Compilation of State, County, and Local Anti-Idling Regulations: http://epamap10.epa.gov/website/StateIdlingLaws.pdf

[8] NYS Department of Environmental Conservation: http://www.dec.ny.gov/energy/57108.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.16 IMPLEMENT TRANSPORTATION TECHNOLOGY SOLUTIONS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

Transportation system management strategies focus on optimizing traffic flow and reducing traveler delays. These systems, when implemented, reduce vehicle speeds and vehicle idling time, which improves air quality and reduces greenhouse gas emissions from the transportation sector.

B. How to implement this action

According to the Federal Highway Administration, there are several strategies that can be implemented to address traffic flow and reduce vehicle delays[9]:

- **Traffic signal synchronization and roadway intersection improvements** – Specific projects include traffic signal synchronization, regional congestion management systems, and intersection improvements. Many of these projects involve elements of Intelligent Transportation Systems (ITS).
- **Incident Management/Traveler Information –** Incident management projects include service patrols that assist or remove disabled vehicles from blocking travel lanes, computer systems that control traffic flow through intersections when incidents occur, and monitoring devices that scan roads and freeways for incidents and send help or reroute traffic around incidents.
- **Speed Control** – Speed controls improve safety and also reduce emissions and fuel consumption.
- **Shifting or Separating Freight Movements** – Local governments can regulate the movement of trucks within some areas of the region at certain times, changing the travel speeds for both trucks and other traffic and improving traffic flow.

CSCs are encouraged to contact DOT for guidance regarding transportation projects (https://www.dot.ny.gov/about-nysdot/contact) .

C. Timeframe, project costs, and resource needs

Staff time, with the assistance of a traffic engineer, is needed to determine the best strategies to implement. Some of the strategies will require additional patrols to manage and enforce the strategy, such as the incident management and speed control measures. Capital costs will include upgrades to existing infrastructure (for example traffic lights), intersection improvements, purchase of ITS equipment, and signage to enforce new speed and freight movement requirements.

9 Federal Highway Administration, Multi-Pollutant Emissions Benefits of Transportation Strategies: http://www.fhwa.dot.gov/environment/air_quality/conformity/research/mpe_benefits/mpe04.cfm

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any local government can implement this action; however, some of the strategies listed above are not applicable to all local governments (i.e., freight movement or traffic signal synchronization). Departments of public works or transportation are typically responsible for this action.

E. How to obtain points for this action

Local governments can receive up to four points for achieving this action. The following outlines the points associated with the individual strategies within this action:

	Possible Points
• Traffic signal synchronization and roadway intersection improvements	2
• Incident management/traveler Information	1
• Speed control	1
• Shifting or separating freight movements	1

F. What to submit

A local government will receive points for this action upon submitting documents that outline the specific details of each strategy: how was it implemented? What was the funding source? Please submit engineering plans, as appropriate, or policies and procedures that include how the strategy is being implemented (i.e., what are the specific guidelines for separating freight movement with the jurisdiction?).

G. Links to additional resources or best practices

- Federal Highway Administration, Multi-Pollutant Emissions Benefits of Transportation Strategies: http://www.fhwa.dot.gov/environment/air_quality/conformity/research/mpe_benefits/mpe04.cfm
- ITS America Knowledge Center: http://www.itsa.org/knowledgecenter
- Central Massachusetts Regional Planning Commission ITS Toolkit: http://www.cmrpc.org/its-toolkit
- European Commission 2Decide Project ITS toolkit: http://www.its-toolkit.eu/2decide

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.17 DEVELOP A NATURAL RESOURCE INVENTORY

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 5

A. Why is this action important?

A natural resource inventory (NRI) is a document that inventories the natural resources of an area, both physical (e.g., geology) and biological (e.g., forests), and provides a foundation for municipal land-use and conservation planning. Communities can use their NRIs to identify priorities and determine appropriate strategies for protecting important natural features and the vital services they provide. A complete and up-to-date inventory can be helpful for communities updating municipal plans, developing ordinances or overlay zones, and reviewing development projects, as well as a tool for county or regional planning and project assessment.

B. How to implement this action

Developing a natural resource inventory can be part of an existing effort, such as the development of a comprehensive or open space plan, or it can be a standalone project. Project leaders should work with the public and stakeholders to collect input and feedback.

First, identify the resources you will inventory, then gather data about those resources in geographic format (e.g., using a geographic information system), and write a report explaining those resources in your community. Providing an assessment of resource quality and conservation considerations is helpful. Some basic information to address in a natural resource inventory is physical geography, geology, soils, watersheds, surface water and groundwater, wetlands, floodplains, land-use, vegetation, and wildlife. Other resources you might include are conserved lands, continuous habitat blocks, unique natural areas, historic sites, farmland, working forests, recreational areas and scenic resources. Much of this information can be obtained from publically available sources. The regional sustainability plans completed under the Cleaner, Greener Communities program will provide information on natural resources.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on development of natural resource inventories (http://www.dos.ny.gov/lg/index.html).

C. Timeframe, project costs, and resource needs

It should take six-twelve months to develop a basic natural resource inventory that pulls together key information. A consultant to develop maps and text for a basic natural resource inventory typically costs $10,000 or less. Communities that want to collect new information to fill data gaps should expect to pay more. A geographic information system (GIS) is vital to creating a good inventory.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

Any New York State local government can create a natural resource inventory. However, due to the overlapping and interconnected nature of many natural resources, communities may wish to develop the inventory at a regional or county level so as to leverage each other's efforts. A local government committee, such as a Conservation Advisory Council would typically lead the development of the inventory. It may be supported by planning staff, or more typically, a consultant.

E. How to obtain points for this action

Local governments can earn points for this action by submitting a completed natural resource inventory. The inventory must process and report content must be substantially similar to those described by *Natural Resources Inventories: A Guide for New Hampshire Communities and Conservation Groups* (available at http://drupal.nhcitizenplanner.org/content/nri-resources).

F. What to submit

Local governments should submit a copy of the natural resource inventory, along with any documentation demonstrating that the inventory was formally adopted, if applicable.

G. Links to additional resources or best practices

- New Hampshire Citizen Planner, Natural Resources Inventories–Resources: http://drupal.nhcitizenplanner.org/content/nri-resources
- Westchester County, NY, Natural Resource Inventory Maps: http://giswww.westchestergov.com/wcgis/NRI.htm
- Town of Eden, NY, Natural Resource Inventory: http://www.edenny.org/images/fina_nat_res_inv.pdf
- Natural Resource Inventory and Analysis for City or County Guidance: http://files.dnr.state.mn.us/assistance/nrplanning/community/nrchecklists/inventory.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.18 DEVELOP A LOCAL FORESTRY OR TREE PLANTING PROJECT OR PROGRAM

Action pathway phase: Implement
Eligibility timeline: Within 15 years prior to the application date
Total possible points: 6

A. Why is this action important?

Preserving the tree canopy in our cities, towns, and communities provides a number of environmental and economic benefits in our communities, including reducing energy use, removing carbon dioxide from the atmosphere, improving air quality, reducing stormwater runoff and creating a sense of place in urban and suburban areas.

B. How to implement this action

A local forestry program can take a number of forms, but should include development of a baseline assessment to focus on the most strategic measures to maintain or expand the local forest and implementation of strategies that work to protect the urban or rural forest. The following strategies can be implemented to build a local forestry or tree planting program:

- Conduct a tree canopy inventory
- Map forested lands
- Enact a tree preservation ordinance
- Implement a large-scale tree planting project
- Participate in one of the State's forest stewardship programs
- Participate in Tree City USA

C. Timeframe, project costs, and resource needs

Creating an urban forestry program or participating in a forest stewardship program will require staff time or coordination with local government staff to collect baseline data and develop maps of the existing tree canopy. If the local government would like to enact a tree preservation ordinance, a local government attorney should be consulted. Access to GIS or the U.S. Forest Service's iTree Program is important for effective planning.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is relevant to any local government. The department or staff members responsible for parks, recreation, public works, or planning are typically responsible for these types of actions. Municipal committees, such as CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

Implement one or more of the following strategies to achieve points for this action:

	Possible Points
• Conduct a tree canopy inventory	2
• Enact a tree preservation ordinance	1
• Implement a large-scale tree planting project	1
• Participate in one of the State's forest stewardship programs	1
• Participate in Tree City USA	1

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

To achieve points for this action, please submit the completed tree canopy inventory, adopted tree preservation ordinance, documentation of a large-scale planting project, documentation of

participation in the State's forest stewardship programs, and/or the adopted and state-approved forest management plan. The tree preservation ordinance may have been completed any time prior to the application date, but the other strategies must have been completed within 15 years of the application date.

G. Links to additional resources or best practices

- A Municipal Official's Guide to Forestry in New York State: http://www.dec.ny.gov/docs/lands_forests_pdf/guidetoforestry.pdf
- U.S. Department of Agriculture, Forest Service, Urban and Community Forestry: http://www.fs.fed.us/ucf/
- U.S. Department of Agriculture, Forest Service, iTree Tool for Assessing and Mapping Community Forests: http://www.itreetools.org/
- NYS DEC Urban and Community Forestry: http://www.dec.ny.gov/lands/4957.html
- Tree City USA: http://www2.arborday.org/programs/treeCityUSA/index.cfm?

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

6.19 PRESERVE NATURAL AREAS THROUGH ZONING OR OTHER REGULATIONS

Action pathway phase: Assess, Plan and Govern
Eligibility timeline: Any time prior to the application date
Total possible points: 6

A. Why is this action important?

Natural areas, including forests, wetlands, rivers, lakes, floodplains and coastal shorelines, play an essential role in our communities. They provide clean air and water, stormwater regulation, food and forestry products, scenic areas, outdoor recreation opportunities, and protect important ecological functions. In addition, natural areas often represent a chunk of stored carbon that, if developed would enter the atmosphere and contribute to our emission problems. Functioning ecosystems also sequester carbon, and on a community scale help to mitigate a community's emissions.

B. How to implement this action

There are several techniques that can be used to focus development into areas best suited for development and preserve open space through local zoning or regulations[10]:

- **Conservation or cluster development zoning** – allows for flexible lot sizes and calls for an analysis of the land's conservation value to determine the area most suitable for building and for conservation
- **Overlay zoning –**applies a common set of standards to a designated area that may cross other conventional zoning districts. This allows local governments to protect several larger areas

10 NYS Department of State, *Local Open Space Planning Guide*: http://www.dos.ny.gov/lg/publications/Local_Open_Space_Planning_Guide.pdf

that may encompass several underlying zoning districts.

- **Performance standard zoning –** establishes zones which are based on an allowable environmental impact to the resources of an area opposed to a specific allowable use.
- **Incentive zoning –** provides for a trading agreement between a developer and a local government. In return for maximizing open space a developer is given a bonus, such as increased density on the site.
- **Special use permits -** outlined in the zoning ordinance, the jurisdiction establishes zones that require a special permit to develop to allow for more discretionary review of individual proposals.
- **Subdivision regulations –** govern the manner by which land is divided into smaller parcels. They can include provisions that help to accomplish natural area conservation, such as explicitly protecting wetlands, steep slopes, or floodplains.
- **Site plan review –** may be enacted by separate local law and involves a review of the design for a proposed development on a particular parcel of land. It ensures that the site design meets established criteria, which may include natural resource considerations.
- **Critical Environmental Area (CEA) designation –** is an opportunity available under SEQRA for the protection of natural areas. Local governments may establish CEAs for specific geographic areas within the community containing sensitive or unique features that require protection. Under SEQRA, the potential impact of a Type 1 or unlisted action on the CEA must be evaluated in the determination of significance, ensuring that the resource is specifically addressed during review.

A local government must determine which of these techniques works best for its specific situation. Using a natural resources inventory or other planning effort is highly recommended to determine where zoning ordinances or other regulations may need to be applied. Some local governments may also choose to address these issues as part of the development of a local waterfront revitalization plan. Whichever strategies the local government chooses, it is advised to seek the counsel of the local government attorney.

In addition, local governments should present information, using geospatial software, to local planning boards and to the public to help them visualize the need to conserve existing natural areas and to increase open space where important.

C. Timeframe, project costs, and resource needs

This action can be implemented with assistance from a professional planner on staff. For many communities, changes in zoning ordinances and other regulations can take up to a year to conduct background research, review existing ordinance language, draft new language, consult with a local government attorney and pass new or revised legislation. Consultants and Cooperative Extensions are very helpful resources in crafting the language and determining the most appropriate policy changes to accomplish local goals.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is relevant to any local government. The planning department or planning board and local government attorney are the primary stakeholders responsible for this action. Municipal committees, such as CSC task force, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

To obtain points for this action, the local government must update the local zoning ordinance or appropriate regulations to protect natural areas.

	Possible Points
• Develop and implement a local zoning ordinance that helps to conserve natural areas	4
• Base local ordinance on strategic conservation of high value areas identified in a natural resource inventory	2

To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plan; however, they are encouraged to do so to reduce the risk of legal challenges.

F. What to submit

Local governments should submit the zoning amendment, ordinance, or other policy that preserves open space. The updated zoning or policy may have been passed at any time prior to the application date.

G. Links to additional resources or best practices

- DEC, *2013 Open Space Conservation Plan Revision:* http://www.dec.ny.gov/lands/317.html
- National Lands Trust, Preserving Open Space: http://www.natlands.org/services/for-municipalities/preserving-community-open-space/
- DEC, Conserving Natural Areas and Wildlife in Your Community: http://www.dec.ny.gov/lands/50083.html
- DEC, Open Space Protection: Putting Local Plans Into Action: http://www.dec.ny.gov/lands/92603.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 7: PLAN FOR ADAPTATION TO UNAVOIDABLE CLIMATE CHANGE

Make a commitment to enhance local resilience by establishing a climate resiliency vision and associated goals, identifying vulnerabilities to climate change impacts for both government operations and the community, and developing and implementing strategies to address those vulnerabilities and increase overall community resilience.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 7: Enhance community resilience and prepare for the effects of climate change			**119**	
Establish a Baseline			**11**	
7.1	Conduct a vulnerability assessment	Assess, Plan, Govern	11	√
Set Goals			**2**	
7.2	Develop a climate resilience vision and associated goals	Commit	2	
Planning and Policy			**15**	
7.3	Review existing community plans, policies and projects to identify climate adaptation strategies and policies or projects that may decrease vulnerability	Assess, Plan, Govern	4	√
7.4	Develop climate adaptation strategies	Assess, Plan, Govern	5	
7.5	Incorporate climate resiliency vision, goals, and strategies into local plans and projects	Assess, Plan, Govern	3	
7.6	Update the multi-hazard mitigation plan to address changing conditions and identify specific actions to reduce vulnerability to natural hazards	Assess, Plan, Govern	3	
Strategies to Address Extreme Heat			**10**	
7.7	Develop and implement a heat emergency plan	Assess, Plan, Govern	4	
7.8	Require shade structures and features in public spaces	Implement	4	

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
7.9	Open new or expand existing cooling centers	Implement	2	
Strategies to Address Flooding			**67**	
7.10	Create or update a watershed assessment to identify flooding and water quality priorities	Assess, Plan, Govern	4	
7.11	Adopt a floodplain management and protection ordinance to reduce vulnerability to flooding and erosion	Assess, Plan, Govern	3	
7.12	Conserve, revegetate and reconnect floodplains and buffers in riparian areas	Implement	7	
7.13	Conserve natural areas for species migration and ecosystem resilience	Implement	7	
7.14	Facilitate a strategic relocation of uses that are not water dependent from flood prone areas	Implement	5	
7.15	Promote community flood prevention strategies through the National Flood Insurance Program Community Rating System	Assess, Plan, Govern	3	
7.16	Use green infrastructure to manage stormwater in developed areas	Implement	7	
7.17	Conserve wetlands and forests to manage stormwater, recharge groundwater and mitigate flooding	Implement	8	
7.18	Use natural, nature-based or ecologically enhanced shoreline protection	Implement	8	
7.19	Extend areas in which the two foot freeboard requirement applies	Implement	3	
7.20	Require consideration of sea-level rise in planning coastal development	Assess, Plan, Govern	3	
7.21	Right-size bridges and culverts and remove unnecessary and hazardous dams	Implement	5	
7.22	Develop or enhance early warning systems and community evacuation plans	Implement	4	
Strategies to Address Drought			**13**	
7.23	Implement a water conservation and reuse program	Implement	6	
7.24	Encourage xeriscaping	Assess, Plan, Govern	2	
7.25	Implement a source water protection program	Implement	6	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

7.1 CONDUCT A VULNERABILITY ASSESSMENT

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 8
Priority action

A. Why is this action important?

To increase local resilience, CSCs must understand where to target their staff and funding resources. Climate change will not affect all community assets, systems, operations, or community members equally, either within a community or among different communities, so performing a comprehensive assessment of local vulnerabilities and risks related to climate change provides an opportunity to effectively identify and thereby address key threats to community resilience in a cost effective and efficient manner.

B. How to implement this action

Developing a vulnerability assessment involves identifying, analyzing and prioritizing the effects of climate hazards. A climate hazard is the potential occurrence of a physical event or trend that could affect specific assets or systems (e.g., transportation or energy infrastructure), vulnerable human populations, ecosystems, industries or the entire community.

Local governments may elect to undertake this action as a standalone project, or as part of a larger effort, such as a climate adaptation plan, climate action plan, comprehensive plan, sustainability plan, hazard mitigation plan, watershed assessment or local waterfront revitalization plan. Interested local governments may also integrate a risk assessment into this action or include risk criteria that address the *magnitude* of impact and *likelihood* of that effect taking place into their prioritization process.

The New York State Department of State (DOS) has developed a risk assessment tool for coastal and riverine communities. It includes guidance on how to prioritize vulnerability, and resilience is an important component DOS's Local Waterfront Revitalization Program (LWRP). See the "additional resources" section for more information. CSCs are encouraged to contact DOS for guidance on use of the risk assessment tool and planning assistance related to coastal and waterfront hazards.

Communities in New York State should consider the following climate hazards and their effects in their vulnerability assessments:

Climate Hazards

- increasing temperatures and extreme heat
- flooding
- drought

Effects

- more flooding
- less snowfall
- more heat waves

- more intense rainfall
- more short-term drought
- more extreme weather
- fluctuating lake levels

Relevant steps to conduct a vulnerability assessment include the following:

1. Research relevant studies of climate change projections
    a) Review and summarize state and regional studies, including Responding to Climate Change in New York State (NYSERDA, 2011) and the NYS 2100 Commission Report (2012)
    b) Review and summarize local studies, if available
    c) If gaps in key information exist between what is available in regional or local studies and what is needed to make local decisions, review and summarize relevant national studies
2. Identify potential impacts to the following assets and systems, as appropriate:
    a) Municipal and private facilities and buildings including critical facilities (e.g., schools, hospitals, fire and police departments)
    b) Transportation infrastructure and systems
    c) Waste disposal techniques and systems
    d) Wastewater treatment infrastructure and systems, including sewer systems
    e) Drinking water sources, infrastructure, and treatment processes
    f) Stormwater infrastructure
    g) Energy sources, infrastructure, and systems
    h) Communication systems
    i) Economic sectors (e.g., manufacturing, recreation and tourism)
    j) Social sectors (e.g., the elderly, youth, low-income and non-native English speakers)
    k) Parks and public land
    l) Public health
    m) Agriculture
    n) Food supply
    o) Natural assets and systems (e.g., wetlands, forests, grasslands, and shrub lands) and the services they provide (e.g., water storage and treatment, wildlife habitat)
    p) Cultural assets
    q) Emergency response systems
3. Identify and assess vulnerabilities of each asset or system (exposure, sensitivity, and adaptive capacity)
    a) Exposure is 1) the degree to which elements of a climate-sensitive asset or system are in direct contact with climate hazards or sensitive to climate variability and 2) the degree to

which the climate hazard may change over time. More information on how to assess exposure can be found in the "additional resources" section.

b) Sensitivity is the degree to which an asset or system will be affected by a change in climate, either beneficially or detrimentally. More information how to assess sensitivity can be found in the "additional resources" section.

c) Adaptive capacity is the ability of an asset or system to adjust to actual or expected climate stresses or to cope with the consequences. More information on assessing adaptive capacity can be found in the "additional resources" section.

4. Prioritize vulnerable assets and systems

   a) Prioritize assets based on their exposure and sensitivity to the effects of climate hazards and their adaptive capacity

5. Develop report of vulnerability assessment findings

6. Establish a timeline for re-assessing vulnerabilities

C. Timeframe, project costs, and resource needs

The timeframe, costs and resources needed for a vulnerability assessment depend on the size of the study area and the staff resources available to contribute to the assessment. Local governments may also choose to develop an initial, less detailed vulnerability assessment with current resources and refine the assessment in the future. A typical timeline for completing a vulnerability assessment is between 6 months to 1 year, depending on staff resources and level of detail required.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments and all departments. The department or people with the responsibility for leading climate and sustainability efforts are most likely to be responsible for this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as the CSC task force. Cross-department involvement and support are recommended, and stakeholder involvement is crucial. The vulnerability assessment could also be developed at a regional level, by the county or a regional organization. Regional organizations or county agencies, like soil and water conservation districts, often have useful data for local assessments. The same departments or representatives listed above should be involved in such a regional effort.

E. How to obtain points for this action

Points are earned for this action by completing a vulnerability assessment that engages staff and the public. The assessment must address at least one climate hazard. Vulnerability assessments completed as part of a community's participation in the NY Rising program or development of a DOS local waterfront revitalization plan would qualify for this action.

	Possible Points
• Vulnerability assessment for 1 climate hazard (scope may be limited to a geographic area or system of concern)	2
• Vulnerability assessment for 2-3 climate hazards (scope may be limited to a geographic area or system of concern)	3

- Comprehensive vulnerability assessment, covering the entire community and all relevant climate hazards 6

F. What to submit

Local governments should submit a copy of the most recent vulnerability assessment report, created within five years prior to the application date. The report must describe the individuals or team that conducted the vulnerability assessment, the climate hazards and effects considered and summarize the assessment process used. If the vulnerability assessment was developed more than five years ago, local governments may update it with any new or updated data or projections, and submit that for credit. If the vulnerability assessment was completed through the NY Rising or Local Waterfront Revitalization Program, documentation of DOS approval of the local plan must be submitted.

G. Links to additional resources or examples

- Responding to Climate Change in New York State: http://www.nyserda.ny.gov/climaid
- Climate Adaptation Guidebook for New York State: http://www.nyserda.ny.gov/climaid
- New York State, NYS 2100 Commission Report: http://www.governor.ny.gov/assets/documents/NYS2100.pdfDEC, Climate Smart Resiliency Planning Tool: http://www.dec.ny.gov/docs/administration_pdf/csrptool.pdf
- DOS, Local Waterfront Revitalization Program: http://www.dos.ny.gov/opd/programs/WFRevitalization/LWRP.html
- New York Rising Community Reconstruction Program : http://stormrecovery.ny.gov/community-reconstruction-program
- US EPA, Climate Change Impacts and Adapting to Change: http://www.epa.gov/climatechange/impacts-adaptation/index.html
- US EPA, Adaptation Tools for Public Officials: http://www.epa.gov/climatechange/impacts-adaptation/adapt-tools.html
- Ecosystem-Based Management Tools Network, Climate Change Vulnerability Assessment and Adaptation Tools: http://www.ebmtoolsdatabase.org/resource/climate-change-vulnerability-assessment-and-adaptation-tools
- ICLEI, Preparing for Climate Change-A Guidebook for Local, Regional and State Governments: http://cses.washington.edu/cig/fpt/planning/guidebook/gateway.php
- Scenic Hudson, Adaptation Planning Resources: http://www.scenichudson.org/slr/adaptation/adaptation-resources
- US EPA Climate Resilience Evaluation and Awareness Tool: http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm
- Social Vulnerability Index: http://webra.cas.sc.edu/hvri/products/sovi.aspxSurging Seas: Sea-level rise Risk Analysis http://sealevel.climatecentral.org/
- New York, NY, Climate Adaptation in New York City: Building a Risk Management Response: http://www.nyas.org/publications/annals/Detail.aspx?cid=ab9d0f9f-1cb1-4f21-b0c8-7607daa5dfcc
- Kingston, NY, Waterfront Flooding Task Force Final Report: www.kingsoncac.org

H. Recertification Requirements

Local governments do not need to completely update their vulnerability assessment every five years for recertification; only the data and projections should be updated, if any new information exists. However, communities should address any significant infrastructure changes since the last vulnerability assessment, if these changes impact the findings and recommendations in the previous version of the vulnerability assessment.

Set Goals

7.2 DEVELOP A CLIMATE RESILIENCE VISION AND ASSOCIATED GOALS

Action pathway phase: Commit
Eligibility timeline: Any time prior to the application date
Total Possible Points: 2

A. Why is this action important?

Establishing a vision for what your community could look like when it's resilient to climate change is both important for building community cohesion and for providing a goal from which to gauge community resilience-building progress. An effective vision is established collectively with stakeholders and provides an opportunity for all community members to help achieve the desired vision. A vision provides a positive future that your community can work together collaboratively to achieve, creating a suite of ancillary community benefits such as enhanced community cohesion, better community health, heightened social networking, and enhanced innovation.

B. How to implement this action

Local governments can initiate a standalone effort to develop the climate resilience vision and goals, or can include this in the scope of an existing effort, such as a vulnerability assessment, climate action plan, or comprehensive plan. Regardless of the approach taken, relevant steps in this process include the following:

1. Public participation sessions to evaluate climate hazards, discuss and prioritize vulnerabilities and develop possible visions for community resilience, including the alteration of any existing community visions to ensure they incorporate the concept of resilience
2. Establishment of a draft vision that is shared on the community's website and open for public comment
3. Revision of the draft vision based on stakeholder feedback
4. Submittal and approval of the draft vision by the community's elected officials
5. Incorporation of vision into planning documents

C. Timeframe, project costs, and resource needs

The timeframe for this task depends on the number of public engagement sessions and the staff resources available. For a local government that opts to hold one public outreach session, it will likely take three to four months to plan for the event, facilitate the event, develop the draft vision, release the draft vision, and then finalize the vision for approval. For communities that opt for more

intensive stakeholder outreach (which is encouraged), this action could take between six and twelve months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments and all departments. The department or people with the responsibility for leading climate and sustainability efforts are most likely to be responsible for implementing this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as a Conservation Advisory Council. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement is crucial. The climate resiliency vision and goals could also be developed at a regional level, by the county or a regional organization. The same departments or representatives listed above should be involved in such a regional effort.

E. How to obtain points for this action

Points for this action are earned by creating a community-wide vision of resilience that is publicly released, officially supported by the community's elected officials and incorporated into at least one plan. To develop the vision, a minimum of one public engagement session must have been performed to engage the public and gather input into the vision document.

F. What to submit

Submit an officially adopted version of the community's vision for resilience and documentation of incorporation of the vision into a community plan. This can be a new vision or a revised version of an existing community-approved vision. Additionally, local governments must submit documentation summarizing the outreach efforts and the stakeholders involved. The vision and goals may have been developed at any time prior to the application date to be eligible for points.

G. Links to additional resources or examples

- New York, NY, Climate Resilience Goal: http://www.nyc.gov/html/dcp/pdf/cwp/vision2020/chapter3_goal8.pdf
- Kingston, NY, Waterfront Flooding Task Force Final Report: www.kingstoncac.org
- New York Rising Community Reconstruction Program: http://stormrecovery.ny.gov/community-reconstruction-program

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.3 REVIEW EXISTING COMMUNITY PLANS, POLICIES AND PROJECTS TO IDENTIFY CLIMATE ADAPTATION STRATEGIES AND POLICIES OR PROJECTS THAT MAY DECREASE VULNERABILITY

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 4
Priority action

A. Why is this action important?

Some strategies identified in community planning processes may help to build a community's resilience to climate change, while others may fail to consider how climate change will affect their implementation. Sometimes slight modifications to existing policies or projects can help a community more effectively prepare for climate change. Conducting a survey of existing plans, policies and projects will help ensure that all community plans and policies will either help reduce or, at a minimum, not increase vulnerability. This will also help your community communicate the importance of climate action and provide an opportunity to integrate climate considerations into your community's operations.

B. How to implement this action

Conduct a self-evaluation of local plans, policies and projects using the Climate Smart Resiliency Planning Tool (see additional resources section below). This action could be accomplished as a standalone project, or as part of another effort such as a vulnerability assessment, climate action plan or climate adaptation plan. The Climate Smart Resiliency Planning (CSRP) tool is designed to help municipal staff to work collaboratively to recognize the opportunities to enhance community resilience in existing documents and to begin to create a set of integrated planning documents that identify vulnerabilities, assess risk and mitigate hazards. A single person should be appointed as a facilitator to ensure that the most knowledgeable and relevant staff contribute to the self-evaluation. Although not necessary, local governments may find it useful to identify someone not associated with the municipality to serve as the facilitator, e.g., a knowledgeable volunteer from the CSC task force or a CSC regional coordinator.

An Excel spreadsheet to facilitate completion of the CRPR checklists is available from the Office of Climate Change.

C. Timeframe, project costs, and resource needs

The timeframe for this depends on the number of plans evaluated and the staff available to undertake the task. A typical timeframe for this action is 1 to 3 months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments and all departments. The department or person with the responsibility for leading climate and sustainability efforts is most likely to be responsible for this action. This action is typically led by the chief elected official's office and undertaken by the city manager's office, or the department of the environment or planning.

Volunteer groups, such as the CSC task force may assist, but detailed input from knowledgeable municipal staff and officials will be necessary.

E. How to obtain points for this action

Points are obtained for this action by conducting a formal review of existing community plans and projects using the Climate Smart Resiliency Planning tool and identifying strategies that help the community prepare for climate change as well as strategies that increase the community's vulnerability to climate change.

	Possible Points
• Complete a review of existing plans and policies using the Climate Smart Resiliency Planning tool	3
• Identify deficiencies in local plans and develop specific recommendations to address them.	1

F. What to submit

CSCs should submit copies of the completed checklists from the Climate Smart Planning Tool or of the completed CSRP spreadsheet. A separate report describing the deficiencies identified during completion of the self-evaluation and the recommendation(s) to address each deficiency should also be submitted.

G. Links to additional resources or examples

- DEC Climate Smart Resiliency Planning Tool: http://www.dec.ny.gov/docs/administration_pdf/csrptool.pdf

H. Recertification Requirements

Local governments do not need to complete a new review of plans, policies and projects every five years for recertification. However, communities should address any significant infrastructure changes or new plans or policies that were not addressed in the initial report.

7.4 DEVELOP CLIMATE ADAPTATION STRATEGIES

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 5

A. Why is this action important?

Communities will need to adapt to changing conditions. Local governments should consider their vulnerability to climate hazards and develop strategies that enhance local resiliency using a collaborative, transparent, and inclusive decision-making process. This will ensure local support to implement actions. Moreover, working with a diverse array of stakeholders will likely increase the quality of potential adaptation strategies and provide opportunities for new partnerships. A variety of technical resources are available to help communities develop strategies through the Climate Smart Communities program.

B. How to implement this action

Developing climate adaptation strategies can be part of an existing effort, such as the development of a climate action plan or sustainability plan, or it can be a standalone effort. Local governments should develop a vulnerability assessment first (Action 7.1) for at least one climate hazard, and then develop climate adaptation strategies to address identified vulnerabilities. Communities should take a watershed approach when developing strategies that address flooding, water quality and quantity and water infrastructure. A watershed approach will help the community understand uphill and upstream sources of flooding and be strategic in developing and prioritizing actions. A typical process for developing climate adaptation strategies includes the following steps:

1. Use a collaborative, inclusive, and transparent planning process
    a) Involve an intergovernmental taskforce
    b) Involve a cross-section of community stakeholders
    c) Perform public outreach
    d) Develop a website for the planning process
2. Research potential actions to address vulnerabilities caused by the effects of climate hazards on community assets and systems for at least one climate hazard as defined in action 7.1. For some issues, like flooding, where a watershed assessment can highlight the most strategic actions, specific studies may be necessary. Useful website information and case studies from other communities can be found on the NYS DEC Climate Smart Communities website (see "additional resources" section)
3. Develop strategies and identify specific actions or projects associated with at least one climate hazard that will help your community achieve its resilience vision and goals
4. Identify lead entities responsible for implementing each strategy and develop implementation plans for each recommended action or project. Consider the timing and construction of other improvements in the community.
5. To the extent appropriate, identify co-benefits of potential actions (e.g., urban forestry reduces the urban heat island effect and helps with stormwater management; water efficiency reduces the demand for water and reduces the amount of energy used to treat and pump water)
6. Develop and publicly release the climate adaptation strategies
7. Create timeline and process for regularly revisiting and updating the climate adaptation strategies

C. Timeframe, project costs, and resource needs

The timeframe and costs of this effort depend on whether the approach taken is a standalone effort or part of a larger planning process. Local governments can anticipate a timeline of approximately nine months to a year to develop a comprehensive and representative set of climate adaptation strategies.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments and all departments. The department or people with the responsibility for leading climate and sustainability efforts is most likely to be

responsible for this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as a Conservation Advisory Council. Cross-department involvement and support are critical, along with support and involvement from stakeholders and the interdisciplinary climate adaptation task force (as identified in PE 1.2) since a variety of staff and local stakeholders will be involved in their implementation. It may be helpful to engage local watershed groups and coordinate with neighboring municipalities. The climate adaptation strategies could also be developed at a regional level, by the county or a regional organization. The same departments or representatives listed above should be involved in such a regional effort.

E. How to obtain points for this action

Points are obtained for this action through creation or update of a climate adaptation plan or through development of adaptation goals and strategies within a climate action plan, sustainability, or comprehensive plan, or other adoptable document (*see 2.5 and 2.6*).

	Possible Points
• Form an intergovernmental taskforce and draft strategies that covers at least one climate hazard for an area or system within your community	1
• Perform public outreach / public review of draft strategies	1
• Incorporate and respond to public comments and publicly release the climate adaptation strategies ideally as part of a climate action plan or other planning process	3

F. What to submit

Local governments should submit a copy of the climate adaptation strategies and/or plan. The strategies must have been created within five years prior to the application date. The plan can be a standalone climate adaptation plan, or a section of a climate action plan, comprehensive plan, sustainability plan, or similar document, which addresses the criteria described above. If the plan was developed more than five years prior to the application date, then local governments should update it with any new information, data, or projections as appropriate, and submit that version for credit.

G. Links to additional resources or examples

- Mid-Hudson Valley's Regional Sustainability Plan: http://www.orangecountygov.com/filestorage/124/1362/MHRSP_Book_opt.pdf
- Climate Change Adaptation: Increasing Local Climate Resilience http://www.dec.ny.gov/energy/82168.html
- New York, NY, Special Initiative for Rebuilding and Resiliency, Adaptation Plan: http://www.nyc.gov/html/sirr/html/report/report.shtml
- New York Rising Community Reconstruction Program http://stormrecovery.ny.gov/community-reconstruction-program
- Kingston, NY, Waterfront Flooding Task Force Final Report www.kingstoncac.org

- Chula Vista, CA, Climate Adaptation Strategies: http://www.chulavistaca.gov/clean/conservation/Climate/documents/ClimateAdaptationStrategiesPlans_FINAL_000.pdf

H. Recertification Requirements

Local governments do not need to completely update their adaptation strategies or plan every five years for recertification; only the data and projections should be updated, if any new information exists. However, communities should address any significant infrastructure changes since the last plan, if these changes affect the findings and recommendations in the previous version of the plan.

7.5 INCORPORATE CLIMATE RESILIENCY VISION, GOALS, AND STRATEGIES INTO LOCAL PLANS AND PROJECTS

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 3

A. Why is this action important?

In order to account for the impacts of climate change on the built and natural environment local governments need to factor climate change considerations into their general/comprehensive plans, zoning and building codes, and other relevant planning documents and projects. This is an effective way to ensure that resilience to climate change is being mainstreamed into internal operations, thereby saving money, time and staffing resources.

B. How to implement this action

To implement this action, local governments need to identify relevant existing plans for projects and find ways to meaningfully integrate climate change adaptation into these efforts as part of the plan or project development or update. When integrating information on climate change impacts, local governments should use the most up to date climate projection information. Communities can require projects seeking funding through a capital improvement program to evaluate their vulnerability to existing and projected climate impacts and provide recommendations on how they will address these vulnerabilities. Sustainability rating systems and certification programs can serve as useful guides for integrating resilience principles into capital projects (see examples below). In general, climate resiliency should be incorporated into any plan or project where the outcomes could be affected by climate hazards. Examples of common plans and project documents that should incorporate climate resiliency include, but are not limited to, the following:

- Comprehensive plans
- Local zoning codes
- Local building codes and design guidelines
- Zoning and subdivision practices (e.g., restrictions on development in floodplains and landslide hazard areas, conservation development)
- Energy planning, management, and distribution
- Waste management planning and operations

- Water system planning and operations
- Watershed plans
- Stormwater management plans
- Water and stormwater management guidelines or local laws
- Local and regional multi-hazard mitigation plans
- Parks and recreation plans
- Open space plans
- Wildfire management plans
- Emergency preparedness and response plans
- Economic development plans
- Coastal zone management plans
- Local waterfront redevelopment plans
- Capital improvement program funded projects
- Building, road and other infrastructure design guidelines
- Health department plans
- County or regional plans and projects

Any local enactment to supersede the state building code will require approval by the State Fire Prevention and Building Code Council (http://www.dos.ny.gov/dcea/code_council.html).

C. Timeframe, project costs, and resource needs

The timing and costs of this action depend on the extent of work the community has already done to develop a resilience vision and goals, conduct a vulnerability assessment and outline specific adaptation strategies for assets and systems. Incorporating climate adaptation concepts into an existing plan or project may have a slight impact in the scope or resource needs for a project, but the costs will depend on the nature of the project and are likely to be modest compared to the long-term costs to the community if climate change is not considered in planning decisions.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

Applicable to all communities with a comprehensive plan, zoning codes, building codes, subdivision and site plan review and design guidelines. The department or people with the responsibility for leading climate and sustainability efforts are most likely to be responsible for this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as a conservation advisory council. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement is recommended.

E. How to obtain points for this action

Points are obtained for this action through formal incorporation of a climate resiliency vision, goals and appropriate response strategies into local planning documents and key projects. Local governments should demonstrate that they have incorporated climate change adaptation into at least one plan or project, other than a climate action plan or climate adaptation plan, to receive credit. Points can also be achieved by requiring projects of a specified scale to incorporate climate adaptation considerations. This may be accomplished through policy or ordinance that requires such projects meet specific standards in sustainability rating system that incorporates climate adaptation or risk. One point will be awarded for each plan into which the climate resiliency vision, goals, and appropriate response strategies have been incorporated, up to a total of three points during any five-year period.

F. What to submit

Local governments should submit any recently updated comprehensive plans, plan amendments, zoning codes, building codes, design guidelines, or other plans that have been updated within five years prior to the application date to address climate adaptation. Local governments must include a memorandum summarizing the relevant updates to the submitted documentation that explains how the local government incorporated climate adaptation into the plan or project.

G. Links to additional resources or examples

- Grand Rapids, MI, Comprehensive Sustainability Plan: http://grcity.us/enterprise-services/officeofenergyandsustainability/Documents/Sust%20Plan%20as%20amended%206-21-11.pdf
- Keene, NH, Comprehensive Master Plan: http://www.ci.keene.nh.us/departments/planning/master-plan-process/cmp-resources
- City of Lewes, DE, Multi-Hazard and Climate Adaptation Plan: http://www.ci.lewes.de.us/pdfs/Lewes_Hazard_Mitigation_and_Climate_Adaptation_Action_Plan_FinalDraft_8-2011.pdf
- Envision™ Rating Tool (sustainability rating program for horizontal infrastructure projects): www.sustainableinfrastructure.org
- Sustainable Sites: http://www.sustainablesites.org/
- LEED for Neighborhood Development: http://www.usgbc.org/neighborhoods
- International Green Construction Code: http://www.iccsafe.org/cs/IGCC/Pages/default.aspx

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.6 UPDATE THE MULTI-HAZARD MITIGATION PLAN TO ADDRESS CHANGING CONDITIONS AND IDENTIFY SPECIFIC STRATEGIES TO REDUCE VULNERABILITY TO NATURAL HAZARDS

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 3

A. Why is this action important?

Changing climate conditions will increase the frequency and magnitude of natural hazards throughout the State. To prepare, communities should integrate projected future changes in precipitation, sea-level rise, and extreme weather into their multi-hazard mitigation plans, and identify specific mitigation and vulnerability reduction actions. Plans should be updated according to the most recent planning standards developed by the NYS Office of Emergency Management. Watershed assessments, if they exist, should be used to prioritize flood vulnerabilities, like unmaintained dams and undersized culverts, and water quality and quantity issues and how they are likely to change over time Identifying water bodies, wetlands, and floodplains and the upstream sources of flooding is critical to understanding the watershed context of flooding issues.

B. How to implement this action

This action can be implemented by undertaking the following:

1. Convene a group of key stakeholders or participate, as a municipality, in a county-level effort,
2. Utilize the results of local or regional vulnerability and watershed assessments and heat and other emergency management plans, if they exist, to identify assets and systems particularly vulnerable to natural hazards in your community and provide this information to the process.
3. Use this information to develop a new multi-hazard mitigation plan or update an existing plan to accommodate projected effects of climate change. Plans must be updated according to the most current planning standards developed by the NYS Office of Emergency Management (see additional resources for more information).

C. Timeframe, project costs, and resource needs

Updating a community or county multi-hazard mitigation plan can take anywhere between four-six months, depending on the amount of time and resources available to help with plan creation.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people with the responsibility for leading emergency management are most likely to implement this action. If no emergency management staff exist, this action can be implemented by those responsible for environmental issues or planning. Cross-department involvement and support are recommended, along with support and involvement from an interdisciplinary climate adaptation taskforce (see 1.2). Staff responsible for public works, transportation planning, engineering and floodplain management should be involved. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees, watershed groups and neighboring municipalities may also be involved. The hazard mitigation plan may also be developed and updated at a regional level, by the county or a regional organization. The same departments or representatives listed above should be involved in such a regional effort.

E. How to obtain points for this action

Points are obtained for this action by submitting a new or a revised hazard-mitigation plan according to the most up to date planning standards developed by the NYS Office of Emergency Management. The plan must include updated information on flood risk and other climate hazards, along with new,

revised or expanded strategies to address the updated risks, and be approved by the community and the NYS Office of Emergency Management.

F. What to submit

A copy or web address of the state-approved new or updated community hazard mitigation plan. The plan must have been updated or created within five years prior to the application date. Local governments must also submit a memorandum summarizing the changes to the hazard mitigation plan that address climate change. If the county led the plan development process, the local government must demonstrate substantial involvement in the process (see introduction).

G. Links to additional resources or examples

- FEMA, Multi-hazard Mitigation Planning. http://www.fema.gov/multi-hazard-mitigation-planning
- NYS Department of Homeland Security and Emergency Management, Multi-hazard Mitigation Planning Standards: http://www.dhses.ny.gov/oem/mitigation/documents/hazard-mit-plan-standards2012.pdf
- Natural Hazard Mitigation Association: http://nhma.info/

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

Strategies to Address Extreme Heat

7.7 DEVELOP AND IMPLEMENT A HEAT EMERGENCY PLAN

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 4

A. Why is this action important?

Changing climate conditions will increase temperatures, leading to more frequent and more intense heat waves. Heat waves are often considered silent killers as they can last for multiple days and slowly wreak havoc on a community. They are particularly dangerous for the elderly, the sick, the socially isolated, non-English speaking populations and the young. Addressing heat waves is critical for ensuring both the long-term resilience of a local community as well as for reducing the number of mortalities and hospitalizations that take place during high-heat events.

B. How to implement this action

This action can be implemented by undertaking the following:

1. Convene a group of key stakeholders to discuss current heat emergency management systems, their effectiveness, and applicability to high-heat events

2. Create a heat emergency plan that identifies and maps vulnerable populations and specifically outlines what your community will do in the case of a heat wave, including an assessment of the capacity of existing programs and barriers to their use
3. Identify existing cooling centers and determine if they have adequate capacity. If necessary, expand existing or designate new geographically distributed cooling centers and a diversity of transportation options to get stakeholders to these cooling centers
4. Work with existing social networks such as neighborhood-based associations, the Salvation Army, Meals on Wheels, the Boy Scouts and Girl Scouts, and religious institutions to create a system to check on the most vulnerable people during heat waves
5. Coordinate with utilities to address public health needs resulting from power disruptions associated with extreme heat events
6. Coordinate with relevant local, regional, and state agencies to determine appropriate trigger levels of key indicators to implement the plan
7. Develop and implement a plan to use existing telecommunications technology and social networking systems to improve early warning and evacuation systems
8. Develop a plan and materials for communicating to non-English speaking populations
9. Review and update the plan after extreme weather events or on a regular basis to ensure its effectiveness

C. Timeframe, project costs, and resource needs

If your community does not already have a heat emergency plan, creating a new one can take from six to ten months, depending on the amount of time and resources available to help with plan creation. If your community already has a plan, updating it to incorporate strategies that can handle existing heat waves as well as future heat waves that could potentially be longer and more intense should take between two to three months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments, but is particularly important for urban communities and communities with large vulnerable populations such as the elderly. The department or people with the responsibility for leading public health efforts are most likely to be responsible for this action. In many cases, the county health department may assume the lead role for this action. Stakeholder involvement is important to understand needs of vulnerable populations.

E. How to obtain points for this action

Points are obtained for this action by submitting a new or a revised heat emergency plan that has been approved by local elected officials and the county emergency management office.

F. What to submit

Submit a copy of the community heat emergency plan and documentation of how strategies within this plan have been implemented. The plan must have been developed or updated within five years prior to the application date, and be actively in use.

G. Links to additional resources or examples

- Philadelphia, PA, Heat Emergency Plan: http://oem.readyphiladelphia.org/HeatPlan
- State of Maryland, Heat Emergency Plan: http://dhmh.maryland.gov/extremeheat/Documents/Heat_Emergency_Plan_Final_Version.pdf
- American Red Cross, Heat Wave Safety Tips: http://www.redcross.org/prepare/disaster/heat-wave
- FEMA, Extreme Heat: http://www.ready.gov/heat

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.8 REQUIRE SHADE STRUCTURES AND FEATURES IN PUBLIC SPACES

Action pathway phase: Implement
Eligibility timeline: Any time prior to the application date
Total Possible Points: 4

A. Why is this action important?

Ensuring that public spaces have shade provides relief for residents and pets during times of heat. Shade structures can include gazebos, trees, or covered outdoor facilities. Having shade structures is particularly important for individuals that may not have access to air conditioning. Moreover, shade structures in public spaces provide opportunities for social networking and public gatherings. Conserving existing forest cover and planting trees and green spaces can moderate temperatures and reduce the urban heat island effect, along with managing stormwater and improving habitat.

B. How to implement this action

To implement this action, local government should:

1. Determine areas in the community particularly vulnerable to high heat or the urban heat island effect or lacking significant shade
2. Create a policy requiring that all public development projects integrate shade features
3. Work with local developments, building commission, external commissions (i.e., planning and zoning), and internal staff to educate them about the goals and specifics of the policy
4. Have the policy approved by local elected officials
5. Ensure compliance with the policy

C. Timeframe, project costs, and resource needs

The costs of implementing this action are minimal and will consist primarily of staff time. The policy can likely be drafted and approved in 3 to 6 months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments, but is particularly important for highly urbanized communities. The department or people with the responsibility for leading climate and

sustainability efforts are most likely to be responsible for this action. These responsibilities are typically led by the department of the environment or planning or by a volunteer body, such as a Conservation Advisory Council. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement is recommended to ensure community support for the effort.

E. How to obtain points for this action

Local governments must adopt a formal policy to require the use of shade structures/features in public development projects. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

F. What to submit

A copy of the policy as approved by the local elected officials as well as any documentation highlighting the increase in shade structures throughout the community. The policy may have been adopted at any time prior to the application date, and must be actively enforced.

G. Links to additional resources or examples

- Creating Shade at Public Facilities: http://www.health.qld.gov.au/ph/documents/hpu/20267.pdf
- US EPA, Trees and Vegetation: http://www.epa.gov/heatisland/mitigation/trees.htm
- NRDC, The Multiple Benefits of Green Infrastructure Solutions, Rooftops to Rivers II (2011), p. 13-16: http://www.nrdc.org/water/pollution/rooftopsii/files/rooftopstoriversII.pdf.

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.9 OPEN NEW OR EXPAND EXISTING COOLING CENTERS

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Implement
Eligibility timeline: Currently active
Total Possible Points: 2

A. Why is this action important?

As temperatures increase, so will the frequency and potential magnitude of heat waves. Vulnerable populations, like the poor and the elderly and non-English speaking populations often lack access to air-conditioning. Public spaces with cooling are vital to their survival during heat waves. Ensuring that a sufficient number of cooling centers are available and accessible, via public transit, to the populations that need them most can reduce hospitalization rates and deaths associated with heat waves.

B. How to implement this action

This action can be implemented by undertaking the following:

1. Evaluate the distribution of places like libraries, schools, movie theaters, malls and other publicly available “cooling” spaces and assess and address barriers that might keep

vulnerable populations from using them. Use the results from the vulnerability assessment (7.1) or heat emergency plan (7.6) to identify the locations of vulnerable populations in the community

2. If existing cooling centers are not adequate to meet the communities' needs identify additional sites and work with property owners and staff at these locations to determine if they can be prepared to serve the public during the next heat wave. Consider the availability of potable water and adequacy of restroom facilities and wastewater treatment.
3. Ensure that multiple types of transit options, including public transit, are available to existing and new cooling centers
4. Ensure that new and existing cooling centers have extended hours, particularly evening hours as this is when the health impacts associated with heat are most acute
5. Work with cooling centers and transit authorities to ensure that pets are able to visit cooling centers and receive transport to cooling centers
6. Work with existing social networks to advertise the existence of cooling centers
7. Open cooling centers during heat waves or particularly warm days
8. Track use of cooling centers and evaluate their effectiveness

C. Timeframe, project costs, and resource needs

Identifying existing cooling centers and designating new ones is a relatively inexpensive and quick thing to accomplish. A local government should be able to achieve this action within 3 to 6 months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments, but is particularly important for urban communities and communities with large vulnerable populations such as the elderly. The department or person with the responsibility for leading public health efforts is most likely to be responsible for this action. In many cases, the county health department may assume the lead role for this action. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2).

E. How to obtain points for this action

Points are obtained for this action by submitting documentation demonstrating the location of existing cooling centers as well as new cooling centers and mapping out the transportation options available to all cooling centers. Data on attendance at cooling centers should also be submitted as well as any supporting documentation about acceptance of pets at cooling centers.

F. What to submit

Local government must submit documentation of active cooling centers and information denoting the acceptance of pets in cooling centers. The cooling centers must be actively in use or available if needed at the time of application.

G. Links to additional resources or examples

- American Red Cross: http://www.redcross.org/prepare/disaster/heat-wave
- FEMA: http://www.ready.gov/heat

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

Strategies to Address Flooding

7.10 CREATE OR UPDATE A WATERSHED ASSESSMENT TO IDENTIFY FLOODING AND WATER QUALITY PRIORITIES

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Within 5 years prior to the application date
Total Possible Points: 4

A. Why is this action important?

Changing precipitation patterns are likely to result in increased flooding affecting communities and ecosystems. Water quantity can be affected by localized, riverine, or coastal flooding; drought; and depletion of groundwater resources. Water quality can be affected by increased erosion and transport of sediment from high flows, increased stormwater pollution, increased sewage overflows from wastewater systems, and higher stream temperatures. These conditions can affect drinking water supplies, infrastructure, recreational opportunities, and stream habitat.

Implementing high-priority strategies and projects to mitigate water quantity and quality impacts requires a comprehensive understanding of hydrology, land use, infrastructure, and changing conditions in and around the community. Watersheds are the framework best suited to managing water resources, and can be delineated at a scale that is appropriate to the community. Understanding how water flows through your community can help ensure that resources are spent on the most strategic and cost-effective actions. Conducting a watershed assessment and creating a watershed management plan can help identify key projects and strategies to improve climate adaptation.

B. How to implement this action

This action can be implemented by undertaking the following:

1. Identify an area or areas on which to focus within the municipality and delineate watersheds that flow to that water body or location. Consider what scale is most appropriate based on your community's concerns and priorities. If watersheds extend beyond the community's boundaries, consider engaging neighboring municipalities and county partners.
2. Review existing baseline information on floodplains, water quality, quantity, land use, intact natural areas, water infrastructure, transportation infrastructure including stream-road crossings and existing watershed management or planning documents. Develop baseline information if none exists.
3. Create or update a watershed assessment that outlines existing conditions in watersheds across the community and describes potential vulnerabilities in the future based on climate hazards. Identify areas vulnerable to flooding, drought, and poor water quality. To the extent possible, identify causes of vulnerabilities and potential mitigation options by assessing conditions upstream of problem areas and within the watershed that drains to those areas.

4. Create or update a list of priority projects based on specific locations, causes of flooding or water quality issues, their watershed context, and the community's needs. Additional research or studies should be undertaken to evaluate specific priorities, if needed. Communities may want to combine this effort with a vulnerability assessment and other adaptation planning actions (7.1-7.5). The development of an assessment will be useful for the implementation of many other actions in Pledge Element 7. Priority projects may include projects to implement adaptation strategies that are listed elsewhere in PE 7, including the following:
    - 7.6 – Update the multi-hazard mitigation plan to address changing conditions and identify specific strategies to reduce vulnerability to natural hazards
    - 7.12 – Conserve, revegetate and reconnect floodplains and buffers in riparian areas
    - 7.13 – Protect natural areas for wildlife migration and flood mitigation
    - 7.16 – Use green infrastructure to manage stormwater in developed areas
    - 7.18 – Use natural, nature-based or ecologically enhanced shoreline protection
    - 7.21 – Right-size bridges and culverts, and remove unnecessary and hazardous dams

C. Timeframe, project costs, and resource needs

Depending on the amount of time and resources available to help with plan creation, this action could take a year or more.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people with the responsibility for emergency management, planning or climate or sustainability efforts are most likely to help implement this action. In some cases, outside expertise will likely prove useful. Cross-department involvement and support are recommended, along with support and involvement from local or regional watershed groups, neighboring municipalities in the watershed and county agencies (such as planning departments, Soil and Water Conservation Districts, etc.) Municipal committees, such as CSC task forces, conservation advisory councils and environmental conservation committees may also be involved. The watershed-based plan could also be developed and updated at a regional or intermunicipal level by the county or a regional or intermunicipal organization. Since watersheds often cross municipal boundaries, this could be especially useful. Local governments claiming credit for participation in regional or intermunicipal assessments will be required to demonstrate substantial involvement in that process to be eligible for points. The same departments or representatives listed above should be involved in such a regional effort.

E. How to obtain points for this action

Points are obtained for this action by collecting and reviewing baseline data and developing a watershed assessment that identifies priority projects to address water quality and water quantity issues.

	Possible Points
• Create or update a watershed assessment document that identifies areas vulnerable to flooding, erosion and/or water quality or quantity problems (1 point awarded for a document that covers less than 75 percent of the community area, 2 points for 75 percent or more)	2
• Create or update a list of specific priority projects that identifies responsible parties	2

F. What to submit

A new or a revised watershed-based assessment and/or watershed management plan.

G. Links to additional resources or examples

- US EPA, A Watershed Approach: http://water.epa.gov/type/watersheds/approach.cfm
- DEC, Watershed Management: http://www.dec.ny.gov/lands/25563.html
- Hudson River Watershed Alliance, Links to watershed plans: http://www.hudsonwatershed.org/maps-resources/watershed-planning/watershed-management-plans.html
- Quassaick Creek Watershed Plan: http://waterauthority.orangecountygov.com/quassaick_watershed.html
- DOS, Watershed Plans-Protecting and Restoring Water Quality: http://www.dos.ny.gov/communitieswaterfronts/pdfs/Guidebooks/watershed/WatershedPlansGuidebook%20wo%20secretary.pdf
- Center for Watershed Protection, Resources on watershed planning: http://www.cwp.org/ .

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.11 ADOPT A FLOODPLAIN MANAGEMENT AND PROTECTION ORDINANCE TO REDUCE VULNERABILITY TO FLOODING AND EROSION

Action pathway phase: Assess, Plan, Govern
Eligibility timeline: Any time prior to the application date
Total Possible Points: 3

A. Why is this action important?

A floodplain is the area adjoining a water body or watercourse (lake, ocean, estuary, river or stream) that is subject to flooding either on a regular basis or during a storm event. These areas are also highly susceptible to erosion. FEMA uses data, models and maps to identify the 1-percent and .2-percent floodplains. Undeveloped floodplains can provide a vital service by collecting and storing overflow and slowing water movement during and after storm events. This also reduces erosion risks. A local government can take action to protect the integrity of a floodplain by restricting or closely managing activities that occur within it.

B. How to implement this action

This action can be implemented through the following steps:

1. Confirm areas vulnerable to flooding and erosion using FEMA Flood Insurance Rate Maps, state maps of Coastal Erosion Hazard Areas (CEHA) and local knowledge. Develop or obtain maps of vulnerability to sea-level rise, if appropriate.
2. Develop policies that are consistent with the local comprehensive plan enabling the floodplain to store and slow water and mitigate flooding and erosion as conditions change.

(For example, setting limits on the types of land uses or structures allowed in floodplains in zoning code, site plan or subdivision review or enforcing coastal erosion hazard areas)

3. Develop and adopt policy(-ies), ordinances or modify zoning to reduce vulnerability
4. Demonstrate enforcement of policy(-ies)

C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs. In general, a community can expect to make progress on this measure in between three-six months and up to a year or more.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people with the responsibility for floodplain administration, leading planning and zoning, and environmental protection will most likely be responsible for this action. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees, watershed groups and neighboring municipalities may also be involved. For this effort to be successful, cross-department involvement and support is recommended.

E. How to obtain points for this action

Points are obtained for this action by providing documentation of the adoption of the policies, ordinances, or actions implemented, demonstration of enforcement. Metrics of success can be submitted for performance points. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation. CSCs are encouraged to contact the DOS Division of Local Government Services for training and assistance related to zoning procedures, adoption of land-use regulations, and legal advice on authorities and procedures (http://www.dos.ny.gov/lg/).

F. What to submit

Local governments must submit copies of ordinances, regulations, updated zoning or incentives that discourage development in floodplains, along with any documentation denoting acres conserved for flood storage or natural buffers created in the community and any associated metrics. The ordinance may have been adopted at any time prior to the application date.

G. Links to additional resources or examples

- FEMA, Floodplain Management Ordinances: http://www.fema.gov/national-flood-insurance-program-2/floodplain-management-ordinances
- FEMA, Stay Dry Program: http://www.fema.gov/media-library/assets/documents/13503?id=3293
- FEMA, Flood Smart Program: https://www.floodsmart.gov/floodsmart/
- Pace Law School, Floodplain Protection Ordinances: http://landuse.law.pace.edu/landuse/documents/FloodplainProt-TPenefield-edited.doc.
- Scenic Hudson, Sea-Level Rise Mapper. http://www.scenichudson.org/slr/mapper
- DEC, Coastal Erosion: http://www.dec.ny.gov/lands/28923.html
- New York, NY, Staten Island Bluebelt: A Natural Solution to Stormwater Management. http://www.nyc.gov/html/dep/html/dep_projects/bluebelt.shtml

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.12 CONSERVE, REVEGETATE AND RECONNECT FLOODPLAINS AND BUFFERS IN RIPARIAN AREAS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 7

A. Why is this action important?

Riparian buffers include floodplains and other natural areas between a stream or other water bodies and human land uses. Expanding riparian buffer areas and restoring vegetation, especially native trees and shrubs, in buffer areas can help reduce some of the impacts of existing and projected future flooding. Vegetation along permanent and intermittent streams, wetlands, and other water bodies can protect or restore those water bodies and contribute a natural buffer around flood zones. In addition to intercepting rainfall, filtering runoff, capturing sediment, soaking in excess floodwaters, providing shade and reducing stream temperatures, reducing erosion, and slowing down the flow of the water, healthy vegetated riparian buffers can contribute to ecosystem resiliency. Native trees and shrubs also offer benefits to habitat. Riparian buffers can help reduce the effects of heavy precipitation events and store water through droughts. Restoring vegetated buffers is important in flood-prone areas, but also in areas upstream of those places to reduce the speed and potentially the volume of floodwaters.

In general, the wider the buffer, the more effective it can be in providing all of the benefits described above. To address flooding, the most effective buffers should include the entire width of the floodplain. A minimum riparian buffer of at least 100 feet is recommended by the US EPA to provide a wide range of stream protection functions.

It is also critical to ensure that streams are connected to their floodplains, so that floodwaters have a place to go. Removing berms, levees or other built barriers that block floodwaters from accessing floodplains may allow those areas to once again collect, store and slow water movement during and after storm events.

B. How to implement this action

This action is focused on implementation efforts to conserve, revegetate and reconnect floodplains and riparian buffers to protect streams and minimize the effects of flooding. Steps taken to implement this action include the following:

1. Use FEMA flood insurance rate maps, historic maps, aerial photos, watershed assessments and local knowledge to confirm current floodplains and identify potential floodplain conservation and restoration/reconnection areas
2. Use aerial photos, watershed assessments and local knowledge to identify areas to conserve or revegetate riparian buffers
3. Use this information to inform land conservation. Your municipality might conserve (or work with a partner to conserve) priority riparian or floodplain areas through conservation

easements, or through land purchase to create parks, nature preserves or other types of protected areas.

4. Coordinate with state and federal agencies, to the extent required, to ensure adherence with state and national policies in restoring floodplain connectivity to the waterway
5. Protect and revegetate riparian buffers with native trees, shrubs, and grasses

C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs. In general, a community can expect to make progress on this measure in between six to twelve months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people with the responsibility for leading parks and recreation development, and planning and zoning are likely to be responsible for this action. If these do not exist, the department or people with the responsibility for leading the climate and sustainability efforts are most likely to be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees and watershed groups may also be involved and can help with outreach to local landowners. County Soil and Water Conservation Districts may be able to provide technical assistance with riparian buffer revegetation, especially in agricultural areas.

In some cases, local governments may wish to work together to implement this action, or by participating in a county-led process. Local governments will need to demonstrate substantial involvement in that process to be eligible for points.

E. How to obtain points for this action

Points are obtained for this action by providing documentation of the actions implemented to protect or restore natural buffers in floodways or coastal zones. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation. Metrics of success are encouraged.

	Possible Points
• Complete an assessment of floodplain and riparian areas, and identify and prioritize sites for conservation, restoration and reconnection of floodplains and conservation or revegetation of buffers	1
• Conserve floodplains or vegetated buffers through conservation easements or land acquisition	1
• Incorporate stream buffer protection into zoning or other land-use regulation	2
• Revegetate a floodplain or riparian buffer area for at least the mapped floodplain width or 100 feet and a length sufficient to reconnect existing vegetated buffer areas	1
• Reconnect a stream to floodplain area	2

F. What to submit

CSCs must submit a new or revised assessment of priority floodplain and riparian areas and any maps and documentation denoting the number of projects protecting or restoring riparian buffers and floodplains, along with their length and width, and any other associated metrics (location, dimensions of the area, vegetation planted or protected). Also, submit any additional documentation demonstrating the reconnection, revegetation or protection of new natural buffers abutting rivers, lakes, coastal areas, or floodplains. If applicable, submit documentation of updated zoning or other regulations protecting stream buffers. The project must have been completed within ten years prior to the application date.

G. Links to additional resources or examples

- DEC, NYS Trees for Tribs: http://www.dec.ny.gov/animals/77710.html
- DEC, Hudson River Estuary Trees for Tribs: http://www.dec.ny.gov/lands/43668.html
- US EPA, National Pollutant Discharge and Elimination System: Riparian/Forested Buffer: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=82
- NYS Association of Soil and Water Conservation Districts: http://nyacd.org/local-districts/
- New York, NY, Staten Island Bluebelt: A Natural Solution to Stormwater Management. http://www.nyc.gov/html/dep/html/dep_projects/bluebelt.shtml

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.13 CONSERVE NATURAL AREAS FOR SPECIES MIGRATION AND ECOSYSTEM RESILIENCE

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 7

A. Why is this action important?

Natural systems support life on earth. They purify our water, clean our air, provide habitat for plants and animals, reduce stormwater runoff, provide natural flood protection, and provide a source of recreation and aesthetic beauty. With climate change and other stressors, many of our natural systems and the benefits they provide to humans are at risk. Large, natural areas with diverse physical conditions and little fragmentation by roads or development are most likely to maintain diverse ecosystems and ecological processes contributing to resiliency. Sustaining resilient ecosystems in a changing climate requires conserving a sufficient variety and amount of habitat and ensuring habitat connectivity through a network of natural areas, corridors, and habitat islands that allow plants and animals to move northward and up in elevation as temperatures increase.
There are many ways to foster habitat connectivity and ecosystem resilience at the local scale through land conservation, zoning and regulations that minimize fragmentation and protect priority natural areas. Wide natural buffers along stream corridors can facilitate terrestrial wildlife movement between larger natural areas and protect aquatic habitat. Aquatic habitat fragmentation should be minimized by correctly designing and installing culverts and removing dams where

appropriate. Larger, landscape-scale natural areas can cross municipal boundaries, and should be assessed in both a watershed and regional context.

B. How to implement this action

Implementation of this action could include the following:

- Identify the natural areas in your municipality that can contribute most to species migration and ecosystem resilience. This can be achieved by using existing tools such as natural resource inventories (6.17) or open space plans, or can be incorporated into new or ongoing town-wide inventories or planning efforts. To identify such areas, municipalities should seek out information on the following:
    - the most vulnerable ecosystems and populations in the community
    - large natural areas at the municipal and regional scale
    - areas with diverse physical geography, e.g., varying geology, soil conditions and topography
    - naturally vegetated stream corridors and floodplains
    - local and regional natural corridors connecting larger natural areas, and known migratory pathways
    - areas where dunes, beaches, and wetlands will migrate as sea levels rise
- Conduct an analysis to prioritize the most important natural areas for species migration and ecosystem resilience. This can be done in an open space plan or other local plan or inventory or by collaborating with a land trust to incorporate species migration and ecosystem resilience into its strategic conservation plan.
- Use the conservation analysis to identify gaps in protection or connectivity between natural areas, especially considering the watershed or regional context, identify areas adjacent to dunes, wetlands and beaches that may serve as migration areas as sea levels rise.
- Use the conservation analysis to inform land conservation. Your municipality might conserve (or work with a partner to conserve) priority natural areas through conservation easements, or acquisition to create parks, nature preserves or other type of protected area.
- Use the conservation analysis to inform land-use planning and a comprehensive plan. For example, establish a critical environmental area or identify areas where conservation development might be used to avoid impacts to a priority natural area.
- Reconnect aquatic habitat in a priority watershed by reconnecting a streams to its floodplain, revegetating shorelines, replacing key culverts or dam removal.
- Increase public awareness and understanding of climate impacts and other stressors to natural systems, fish, wildlife, and the benefits they provide human communities.

C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs, including volunteer time, staff time, consultant time, land purchases, marketing and education materials.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people with the responsibility for planning and zoning or parks and recreation will most likely be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Municipal committees such as CSC task forces, conservation advisory councils and environmental conservation committees may conduct natural resource inventories and support education efforts. External organizations, especially land trusts, are an excellent partner in conservation planning and implementation. Watershed groups and nature centers may also be important partners, especially for educational efforts.

Natural areas often cross political boundaries, and in some cases, local governments may wish to work together to implement this action or participate in a county-led process. Local governments will need to demonstrate substantial involvement in that process to be eligible for points. Local governments may also consider collaborating with land trusts or other conservation organizations to implement this action.

E. How to obtain points for this action

Points are obtained for this action by actively planning for and preserving or increasing the total acreage of conservation land in priority natural areas. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation. CSCs may receive points for each separate and distinct high-priority natural area conserved during a five-year period.

	Possible Points
• Conduct an analysis to identify and prioritize high-priority natural areas for species migration and ecosystem resilience based on a natural resource inventory, open space plan or other study	1
• Incorporate conservation of high-priority natural areas into a comprehensive plan	1
• Incorporate conservation of high-priority natural areas into zoning or other land-use regulations	3
• Conserve a high-priority priority natural area identified through a natural resources inventory or conservation analysis and planning	2

F. What to submit

Submit a new or updated natural resource inventory, open space inventory, open space plan, or other conservation plan identifying high-priority areas for species migration or ecosystem resilience, and any maps or documentation demonstrating conservation of a high-priority natural area, or relevant updates to a comprehensive plan, zoning or other land-use regulations targeting the conservation of high-priority natural areas.

G. Links to additional resources or examples

- Environmental Land Institute, Strategic Conservation Planning: http://www.eli.org/pdfs/landtrusthandbook/1.pdf

- IUCS, Global Protected Areas Program Best Practices: http://www.iucn.org/about/work/programmes/gpap_home/gpap_capacity2/gpap_bpg/
- DEC, Conserving Natural Areas and Wildlife in Your Community: http://www.dec.ny.gov/docs/remediation_hudson_pdf/hrebch.pdf
- DEC, Local Open Space Planning Guide: http://www.dos.ny.gov/lg/publications/Local_Open_Space_Planning_Guide.pdf
- DEC and National Wildlife Federation, *Assessing the Vulnerability of Key Habitats in New York. A Foundation for Climate Adaptation Planning*: http://www.nwf.org/What-We-Do/Energy-and-Climate/Climate-Smart-Conservation/Adaptation-Reports.aspx
- US Fish and Wildlife Service*, National Fish, Wildlife and Plants Climate Adaptation Strategy*: http://www.wildlifeadaptationstrategy.gov/index.php
- Dutchess County, NY, Natural Resources Inventory: http://www.co.dutchess.ny.us/countygov/departments/planning/16138.htm
- Rosendale, NY, Natural Resources Inventory: http://www.townofrosendale.com/government/commissions/environmental-commission/
- Montgomery and Wallkill, NY, Natural Resources Inventory: https://sites.google.com/site/townofmontgomerycac/nri

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.14 FACILITATE A STRATEGIC RELOCATION OF USES THAT ARE NOT WATER DEPENDENT FROM FLOOD PRONE AREAS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 5

A. Why is this action important?

In nearly every community, there are areas that regularly flood. In many cases, the flooding of these areas leads to significant costs (financially and socially) to the community and the region. In some cases, such as a port or boat launch, where the land use is water dependent, it may not make sense to relocate the use. In other cases, such as a school or hospital, it may make sense to relocate the use to reduce risk. Identifying areas that repeatedly flood and are appropriate for relocation and devising a program to strategically relocate those uses or assets can reduce or eliminate the risk of flood damage, reduce emergency response demands and potentially save lives. In addition, strategic relocation can facilitate landward migration of natural shoreline areas and promote the creation of intertidal habitat.

B. How to implement this action

Strategic relocation of assets or land uses could be implemented using various legislative, policy or incentive tools. Typically, the first step is to map at-risk assets or uses. This might also include areas of potential development like zoning districts. Then an assessment can be done of uses or structures that might be cost-effective to relocate to reduce long-term risk. If a use or structure is relocated,

suitable areas must be found within the community. A use could also be discontinued if it no longer meets a need. In cases where a water dependent use must be located near the shoreline or relocation is not feasible it may make sense to consider other resiliency measures such as elevating the structure or its critical systems to reduce vulnerability.

To plan and implement strategic relocation of assets or land uses, communities should:

1. Map areas at risk from flooding and sea-level rise and uses or assets along the waterfront. Refer to a vulnerability assessment (7.1) or watershed assessment (7.10), if one exists.
2. Work with stakeholders to 1) identify uses that are water dependent and/or cannot be relocated and 2) identify uses or assets that could be relocated, and 3) identify potential sites that could receive a relocated structure or land use
3. Work with stakeholders to identify uses most appropriate for relocation, whether the uses continue to meet a need, and whether there are more appropriate sites in the community that are less vulnerable to flooding.
4. Create a plan or strategy for what strategic relocation would look like in the various areas of the community where it is warranted. Ensure that this plan is connected, to the extent relevant, to other waterfront planning efforts (e.g., a Local Waterfront Revitalization Program). The strategy or plan must have clear timelines for each action as well as detail about who is responsible for implementing each step and what public education or engagement strategies need to happen to ensure the seamless implementation of the plan.
5. Work with partners to facilitate strategic relocation of uses or structures

Communities should also explore the use of planning and regulatory tools such as the transfer of development rights (TDR) to ensure that structures damaged or destroyed due to flooding in high-risk areas are rebuilt in less vulnerable areas.

C. Timeframe, project costs, and resource needs

Creating the framework for strategic relocation in a community's flood prone areas should be done in collaboration with stakeholders affected by this change. If a community has not already started this process, it is possible planning for strategic relocation could take a year or more. Implementation of the plan will likely take many years and require external as well as internal funding.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people with the responsibility for planning and zoning will most likely be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees, or watershed groups may also be involved. This action could be led by another organization, such as a county, but the local government must demonstrate substantial involvement in the effort to receive points.

E. How to obtain points for this action

Points for this action are obtained by demonstrating that a plan for strategic relocation from flood prone areas exists, as a standalone document or as part of a larger report, and that steps have been

taken to implement the substance of the strategic location plan through incorporation of plan provisions into the comprehensive plan, zoning or other regulations.

	Possible Points
• Develop and officially adopt a plan for strategic relocation	2
• Incorporate provisions of the strategic location plan into the comprehensive plan	1
• Incorporate provisions of the strategic location plan into zoning or other regulations.	2

F. What to submit

A plan detailing to which areas in the community a strategic relocation will apply, why relocation is being planned in this area, who is responsible for implementing relocation, and how it will be achieved must be submitted. Additionally, public outreach materials developed to inform and engage stakeholders in the strategic relocation planning and implementation process should be submitted. Documentation of relevant amendments to the comprehensive plan, zoning or regulations should also be submitted. The plan and implementation of the plan must have occurred within ten years prior to the application date.

G. Links to additional resources or examples

- NOAA Ocean and Coastal Management: http://coastalmanagement.noaa.gov/initiatives/shoreline_ppr_retreat.html
- Soldiers Grove, WI: http://www.soldiersgrove.com/Floods.htm
- City of Kingston CAC Tidal Waterfront Flooding Taskforce: http://kingstoncac.org/index.php/initiatives/tidal-waterfront-flooding-task-force
- Cedar Rapids, IA, Voluntary Property Acquisition (Buyout) Program: http://www.cedar-rapids.org/city-news/flood-recovery-progress/floodrecoveryresources/buyoutprogram/Pages/default.aspx
- NOAA, Ocean and Coastal Resource Management, Managed Retreat Strategies Case Studies: http://coastalmanagement.noaa.gov/initiatives/shoreline_ppr_retreat.html#1

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.15 PROMOTE COMMUNITY FLOOD PREVENTION STRATEGIES THROUGH THE NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Currently active
Total Possible Points: 3

A. Why is this action important?

The Community Rating System (CRS) is a program of the Federal Emergency Management Agency National Flood Insurance Program. Participating in the CRS reduces flood risk and can help to reduce insurance rates for property owners. Ensuring that citizens are aware of potential flood risk and

know what to do to prevent or minimize the extent of flooding in their personal lives is critical to ensuring public health and safety are maintained during extreme weather events, and is vital to helping the community enhance its overall resilience to climate change. Moreover, having a well-prepared community can lead to an overall cost savings for both the local government and for local residents.

B. How to implement this action

Local governments can implement this action by participating in the CRS program and undertaking actions in the CRS such as the following:

- Notify residents in the 1-percent and .02-percent floodplain of their flood risk and provide information on the National Flood Insurance Program
- Obtain and maintain FEMA elevation certificates on all new buildings and substantially improved structures constructed in the 1-percent floodplain
- Map and track repetitive loss properties and develop a plan to address the repetitive loss problem
- Compile educational information on common flood prevention strategies that residents and businesses can take and disseminate that information to property owners in flood prone areas.
- Provide incentives for residents and businesses that proactively undertake efforts to prepare for flooding

Local governments are encouraged to apply a watershed approach when evaluating and prioritizing projects.

C. Timeframe, project costs, and resource needs

The specific costs and timeframe associated with this action depend on the size of the community and the amount of pre-existing work that has taken place to help residents and businesses prepare for flooding. In general, a community should be able to complete this action within six to nine months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all cities, villages and towns, but the local government must be a participant in the National Flood Insurance Program to be eligible for the Community Rating System. The departments or people with the responsibility for leading, planning and zoning, and environmental protection will most likely be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils and environmental conservation committees and watershed groups and neighboring municipalities may also be involved.

E. How to obtain points for this action

Points for this action can be obtained by demonstrating participation in the Community Rating System of the National Flood Insurance Program.

	Possible Points
• Active enrollment in the National Flood Insurance Program Community Rating System	3

F. What to submit

Local governments should submit documentation indicating that they are participating in the FEMA Community Rating System program (CRS) and their rating system level.

G. Links to additional resources or examples

- FEMA, National Flood insurance Program Community Rating System: http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-rating-system

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.16 USE GREEN INFRASTRUCTURE TO MANAGE STORMWATER IN DEVELOPED AREAS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 7

A. Why is this action important?

Green infrastructure is an approach to stormwater management that uses natural or engineered features to store stormwater, instead of solely relying on "grey infrastructure" such as sewers and water treatment facilities. Green infrastructure captures rain and stormwater close to where it hits the ground, slowing down its flow and allowing it to infiltrate into groundwater. This helps to decrease flooding and combined sewer overflow events by reducing runoff. With increasing storms, even separated storm sewers may not be sized to deal with larger volumes of runoff; implementing green infrastructure practices can help maintain the capacity of existing infrastructure. This can save the local government significant financial resources, reduce flooding from stormwater, improve water quality and quantity problems, and create more community green space.

Green infrastructure projects should be implemented in strategic locations, either as high-visibility demonstration projects for the community or in key locations to mitigate water quantity or quality impacts. A watershed approach should be used to assess the most strategic sites or strategies to capture stormwater using green infrastructure.

B. How to implement this action

To implement this action, communities should:

1. Identify existing developed sites that are viable sites for onsite stormwater management retrofits using green infrastructure. Assess all municipally owned or operated properties or facilities for opportunities to install green infrastructure demonstration projects.
2. To the extent necessary, identify the most strategic locations for green infrastructure within

the community by updating or creating a plan for holistically managing stormwater, based on watersheds and including combined or separated sewersheds. Consider upstream sources of localized or riverine flooding.

3. Ensure that all aspects of selected strategy comply with Department of Health regulations and building codes regarding rainwater harvesting and gray water recycling.
4. Work with landowners to obtain permission to implement projects in strategic locations that could reduce flooding, improve water quality or serve as high-visibility demonstration sites.
5. Consult with an engineer or landscape architect for appropriate design practices for retrofits in highly urbanized areas.
6. Implement selected projects.
7. Encourage or require training for local government staff, code enforcement officers, planning board members, and zoning board members in planning, siting, implementing and maintaining green infrastructure stormwater management practices.
8. Implement the most appropriate green infrastructure practices in targeted areas, which could include the following:
    - Downspout disconnection
    - Rainwater harvesting (rain barrels and cisterns)
    - Rain gardens and bioretention areas
    - Stormwater planters
    - Vegetated swales
    - Permeable pavements
    - Green roofs
    - Tree plantings/tree pits
    - Stream daylighting (i.e., exposing formerly culverted or buried streams)
9. These practices could be implemented in targeted locations:
    - Alleys and streets
    - Parking lots
    - Municipally-owned land
    - Residential and commercial properties

Green infrastructure installations must comply with all applicable codes.

C. Timeframe, project costs, and resource needs

The timeframe to implement this measure depends on the number and scale of specific green infrastructure projects a community is looking to implement. In general, a community should be able to complete this action within one or two years. In many cases, additional funding or staffing resources may be needed to implement this action.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people with the responsibility for leading the Municipal Separated Storm Sewer System (MS4) program, planning and zoning, and building codes will most likely be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils, and environmental conservation committees and neighboring municipalities may also be involved. Watershed groups, regional groups and county agencies may be able to contribute valuable information and expertise.

For more complex designs, communities should work with an engineer or landscape architect or designer to create plans.

E. How to obtain points for this action

Points for this action are achieved by demonstrating that a community has implemented green infrastructure practices or projects and participated in green infrastructure training over any ten-year period.

	Possible Points
• Develop a community-wide plan for green infrastructure retrofits	1
• Design and implement 1 green infrastructure practices or project to mitigate stormwater from existing development	1
• Design and implement 2 green infrastructure practices or projects, to mitigate stormwater from existing development	2
• Design and implement 3 green infrastructure practices or projects, to mitigate stormwater from existing development	3
• Design and implement 4 green infrastructure practices or projects, to mitigate stormwater from existing development	4
• Completion of green infrastructure training by more than half of community's code enforcement officers, and zoning and planning board members	2

F. What to submit

To achieve credit, local communities must submit documentation of any community-wide plans and green infrastructure projects implemented. Calculations on the decrease in runoff due to the increase in natural stormwater storage capacity can be submitted for performance points. If trainings were completed, submit documentation with the names and titles of the staff that received training and date the training occurred. The project(s) must have been complete within ten years prior to the application date, except that training must have been completed within the past 5 years.

G. Links to additional resources or examples

- DEC, Stormwater: http://www.dec.ny.gov/chemical/8468.html

- DEC, New York State Stormwater Management Design Manual: http://www.dec.ny.gov/chemical/29072.html
- DEC, Erosion and Sediment Control Training: http://www.dec.ny.gov/chemical/8699.html
- DEC, Hudson River Estuary Program Green Infrastructure Examples for Stormwater Management in the Hudson Valley: http://www.dec.ny.gov/lands/58930.html
- US EPA, Green Infrastructure: http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm#tabs-1
- US EPA National Menu of Stormwater Best Management Practices: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm
- US EPA Low Impact Development Resources: http://water.epa.gov/polwaste/green/
- Low Impact Development Center: http://www.lowimpactdevelopment.org

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.17 CONSERVE WETLANDS AND FORESTS TO MANAGE STORMWATER, RECHARGE GROUNDWATER AND MITIGATE FLOODING

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 8

A. Why is this action important?

Identifying and protecting natural areas like wetlands and forests is an important first step in managing stormwater and flooding. Wetlands and forests are very effective at holding stormwater and allowing it to slowly infiltrate into the soil. By slowing and filtering excess water across the watershed, wetlands and forests can help protect streams against water quality or quantity issues. It is especially useful to understand wetlands and forests within a watershed context to better assess how they contribute to managing stormwater and mitigating flooding at the local scale. Large, intact wetlands and forests and those that provide connectivity between natural areas also contribute to ecosystem resilience and will facilitate species migration with climate change (see 7.13).

It is far more cost-effective to protect natural areas than to restore them, or the streams they are protecting, after they have been degraded. Conserving wetlands and forests in floodplain areas is particularly important (see 7.11), but conserving these areas throughout the watershed can contribute numerous benefits. These benefits include providing clean water, improving air quality, moderating extreme heat and serving as critical wildlife habitat (see 7.13). These benefits can be maintained by clustering housing units away from wetlands and streams, maintaining or restoring natural riparian buffers (see 7.12), and minimizing the fragmentation of large forest areas by roads or development. Reducing the amount of impervious surface such as roads and driveways is also important to limit the amount of runoff that is produced in developed areas.

In New York State, forests have no legal protection, and wetlands smaller than 12.4 acres in size are not protected by the Freshwater Wetlands Act (Article 24 of the Environmental Conservation Law)

unless they are determined to be of 'Unusual Local Importance' by DEC. At the federal level, recent Supreme Court decisions have potentially left "isolated" wetlands (those without a permanent surface water connection to larger water bodies) vulnerable to filling, draining and other impacts. Isolated wetlands contribute to groundwater recharge and floodwater retention, and because they serve as nutrient sinks, they help to maintain water quality. They also provide important wildlife habitat. Local governments can play an important role in filling the gap in wetland and forest protection through comprehensive planning, zoning, regulations and land acquisition in fee or conservation easements. Forestry can be compatible with stormwater and other benefits provided it is done in accordance with established guidelines, and can provide economic incentives for forest conservation.

B. How to implement this action

This action can be implemented by undertaking the following:

1. Conduct an analysis to identify and map important forests and wetlands in the community. Map and overlay watersheds, at a scale that is appropriate for the community, to assess which natural areas might be more significant for stormwater management and flooding mitigation on particular streams. This analysis may be completed based on a natural resource inventory (6.17) or as part of a watershed assessment (7.10).
2. Use the analysis of forests, wetlands and watersheds to inform land-use planning and improve local protection and conservation, such as through a wetland ordinance. Site plan or subdivision regulations can require identification of these areas and set guidelines to protect them, including identifying areas where conservation development might be used to protect the integrity of wetlands and forests. Identifying sustainable forestry as a use or adopting a forest zone may help prevent the fragmentation and conversion of forestland to other developed uses.
3. Protect high-priority forests or wetlands through land purchase or conservation easements, working with land trusts or other partners.
4. Conserve forests and wetlands on municipally owned property and develop a management plan that protects stormwater handling capacity and other benefits.
5. Educate residents on the importance of conserving forests and wetlands.

CSCs are encouraged to contact the New York State Department of State Division of Local Services for training, technical assistance and legal guidance on stormwater management and flood mitigation (http://www.dos.ny.gov/lg/index.html).

C. Timeframe, project costs, and resource needs

This action includes both short-term and long-term strategies with varying implementation costs. In general, a community can expect to make progress on this measure in six to twelve months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people with the responsibility for planning and zoning, stormwater or managing open space and natural areas are most likely to be responsible. Cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils or environmental conservation committees and watershed planning groups may also be involved. This action could be led by another organization, such as a county, but the local government must demonstrate substantial involvement in the effort to receive points.

E. How to obtain points for this action

Points are obtained for this action by submitting documentation that demonstrates the planning and implementation of projects to conserve wetlands and forests. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

	Possible Points
• Incorporate wetland and forest conservation into a comprehensive plan goal	1
• Conduct an analysis to identify important forests and wetlands in the community, including watershed boundaries, and prioritize key areas for conservation	1
• Incorporate conservation of unprotected wetlands and forests into site plan and subdivision regulations, performance standards, or other land use regulations	2
• Develop a local wetland protection ordinance	2
• Establish a management plan for municipal forest land that conserves stormwater regulation and other benefits	1
• Conserve one high-priority priority wetland or forest areas	1

F. What to submit

Local governments should submit a new or updated plan identifying priorities for wetland and forest conservation, an updated comprehensive plan, zoning or other regulations contributing to wetland and forest conservation, a new wetland protection ordinance, a forest management plan for municipal property, and/or any documentation of land conservation. The projects must have been completed within ten years prior to the application date to be eligible for points. CSCs may receive 1 point for conservation of each separate and distinct high-priority priority wetland or forest area over the 10-year period.

G. Links to additional resources or examples

- DEC, Hudson River Estuary Program Code and Ordinance Worksheet for Development Rules in New York State http://www.dec.ny.gov/docs/remediation_hudson_pdf/cownys.pdf
- DEC, Forest Stewardship Program: http://www.dec.ny.gov/lands/45934.html
- DEC, Conserving Natural Areas and Wildlife in Your Community. http://www.dec.ny.gov/docs/remediation_hudson_pdf/hrebch.pdf
- DEC, Small Wetlands Conservation: http://www.dec.ny.gov/docs/remediation_hudson_pdf/hrebswres.pdf
- New York Planning Federation, DEC, Empire State Forest Products Association, *The Municipal Official's Guide to Forestry in New York State*: http://www.dec.ny.gov/docs/lands_forests_pdf/guidetoforestry.pdf
- US EPA, Natural Infrastructure: http://www.epa.gov/region03/green/infrastructure.html

- Green Infrastructure Center, *Green Infrastructure Guide for New York:* http://www.gicinc.org/book.htm
- Aspen Institute, *Nature as a Foundation of Economy: Investing in Natural Infrastructure for Conservation Supporting Human Development*: http://www.aspeninstitute.org/publications/nature-foundation-economy-investing-natural-infrastructure-conservation-supporting
- Climate Solutions, *Natural Infrastructure: A Climate-Smart Solution.* http://www.aspeninstitute.org/publications/nature-foundation-economy-investing-natural-infrastructure-conservation-supporting
- Center for Watershed Protection, *Watershed Forestry Resource Guide*: http://www.forestsfor watersheds.org/forests-and-drinking-water/
- Cornell Cooperative Extension, Forest Connect: http://www2.dnr.cornell.edu/ext /forestconnect/
- New York, NY, Staten Island Bluebelt: A Natural Solution to Stormwater Management. http://www.nyc.gov/html/dep/html/dep_projects/bluebelt.shtml

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.18 USE NATURAL OR ECOLOGICALLY-ENHANCED SHORELINE PROTECTION

Action pathway phase: Implement

Eligibility timeline: Within 10 years prior to the application date

Total Possible Points: 8

A. Why is this action important?

Changes in climate are projected to increase the frequency of intense storms and sea-level rise. Inland water bodies will experience more erosion of their banks and overflowing of their banks (flooding) and, potentially. Shorelines in coastal and estuarine areas will experience erosion and flooding due to increased storm intensities and, ultimately, permanent inundation of areas of the shore zone due to sea-level rise. Greater fluctuations in water levels and reduced ice cover may lead to greater shoreline erosion in the Great Lakes.

Actions in this pledge element address vulnerability along stream and riverbanks, and lake, estuarine and ocean shorelines: where water meets the land. Sea-level rise and stronger storms will increase community demand for protection from erosion, flooding and permanent inundation. Banks and shorelines naturally move in response to erosion and deposition of sediment, but structures used to harden shorelines to protect buildings and property and prevent erosion upset the balance between erosion and sediment deposition.

Bank and shoreline protection can range from conserving natural shorelines and allowing nature to maintain a balance, to nature-based solutions, to “grey” or hard-engineered methods. Nature-based solutions (sometimes referred to as “bio-engineered” or “green”) use vegetation or a combination of structural features and vegetation to prevent erosion. In some cases, they can also provide flood

protection. Nature-based treatments such as dunes, shellfish reefs and constructed wetlands and re-vegetated banks provide habitat and other ecological functions. Traditional engineered hard (or "grey") methods use materials like steel, wood, concrete or rock with no vegetation. They include sloped armoring (revetments), vertical armoring (bulkheads and cribbing), seawalls and shore stabilization approaches such as jetties, breakwaters and groins. Grey structures can be ecologically enhanced by adding structural diversity (nooks and crannies), avoiding straight lines and using materials that encourage aquatic growth.

Note: The term green infrastructure is increasingly used to describe erosion protection and coastal defenses using nature-based methods. It is important to not confuse the use of this term in the context of erosion control with its other common usage in the context of stormwater management.

"Grey" infrastructure has traditionally been used to accommodate working waterfronts, prevent erosion or attempt to keep water out of an area entirely. However, these types of structures often encourage development in risky areas leading to catastrophic consequences if they are overtopped or fail. In addition, because they are difficult to modify once built, their effectiveness is likely to diminish over time as sea levels rise and storms become more intense. They also often have negative impacts on adjacent properties, and plants and animals that use the shoreline or bank. For these reasons, conservation of natural areas and construction of nature-based or "green" shoreline protection and bank stabilization measures are preferred, especially in low-risk areas. In cases where grey infrastructure protection measures are needed they can be ecologically-enhanced.

B. How to implement this action

To implement this action, local communities should utilize the results from the climate vulnerability assessment to understand which areas may be prone to erosion and flooding. Communities should complete a shoreline assessment in these areas to determine if shoreline protection or bank stabilization is warranted and whether nature-based or ecologically-enhanced measures can be used. Points will be awarded for conserving natural areas and using nature-based solutions. To choose whether and where protective measures are necessary, local governments should take the following steps:

1. Understand what areas in the community are vulnerable to flooding and erosion, and evaluate whether shoreline protection or bank stabilization is necessary. Plan to conserve natural shoreline where possible, especially in low-risk areas.
2. Identify areas where constructed measures are necessary and the type and extent of structures. Consider whether existing grey infrastructure can be enhanced or replaced with nature-based measures or is no longer needed. .
3. Work with state agencies and the Army Corps of Engineers, where necessary, to design and site projects. Ensure that future projections of climate change are incorporated into design specifications.
4. Conserve natural shoreline and bank areas. Update or build necessary protective shoreline or bank stabilization infrastructure.

Almost all shoreline protection or stabilization projects require approval by DEC and, potentially, other agencies. Project managers are encouraged to contact the regional permit administrators for the DEC region in which they are located for information on permitting requirements (http://www.dec.ny.gov/about/50230.html) and to contact staff in the DEC programs referenced below for design guidance.

C. Timeframe, project costs, and resource needs

From initiation to implementation, this measure will likely take a local government one to three years. Additional staffing resources and financial resources will likely be needed to successfully implement this action.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people responsible for public works, planning and engineering are most likely to be responsible for this action. For this effort to be successful, cross-department involvement and support are recommended. Since the effects of shoreline hardening or bank stabilization cross property and municipal boundaries, it is important to have support and involvement from neighboring property owners, municipalities and county agencies. Municipal committees, such as CSC task forces, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

In order to achieve points for this action, a local government must demonstrate that a shoreline or bank stabilization assessment has been completed, natural shorelines or banks have been conserved, and nature-based or ecologically-enhanced protection has been used instead of or to replace grey infrastructure. To be eligible for points for this action, local governments are not required to incorporate policies related this element into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

	Possible Points
• Complete a shoreline or bank assessment	2
• Conserve natural shoreline and banks wherever possible	3
• Use nature-based or green protection instead of or to replace grey infrastructure	2
• Enhance grey infrastructure with ecological improvements	1

F. What to submit

In order to achieve points for this action a local government must submit documentation of the action taken. If existing or planned traditional grey infrastructure was replaced with nature-based or ecologically-enhanced measures submit photos or other documentation of pre-existing grey infrastructure that was replaced, or plans or demonstrated need for grey infrastructure that was modified. If the action was taken on private property, the local government must demonstrate substantial involvement (see introduction). Local governments are encouraged to submit documentation on the percentage of shoreline or waterfront affected and provide any information on overall performance of the infrastructure during storms.

G. Links to additional resources or examples

- DEC, Hudson River National Estuarine Research Reserve, Hudson River Sustainable Shorelines, http://www.hrnerr.org/hudson-river-sustainable-shorelines
- DEC, Shoreline Stabilization Techniques: http://www.dec.ny.gov/permits/67096.html
- DEC, Protection of Waters Program: http://www.dec.ny.gov/permits/6042.html
- DEC, Dam Safety: http://www.dec.ny.gov/lands/4991.html

- DEC, Coastal Erosion Control Design, http://www.dec.ny.gov/lands/86534.html.
- Filipowicz, Amy B. (2006) The Guide to Ecologically-Based Stream Restoration in New York's Coastal Watersheds: http://www.csc.noaa.gov/cms/fellows/04_fellows_Ecologically_Based_Stream_Restoration%20Guide.pdf
- New York, NY, Vision 2020: New York City Comprehensive Waterfront Plan: http://www.nyc.gov/html/dcp/html/cwp/index.shtml
- New York, NY, Urban Waterfront Adaptive Strategies: http://www.nyc.gov/html/dcp/html/sustainable_communities/sustain_com7.shtml
- Northwest Regional Planning Commission
  The Shoreline Stabilization Handbook for Lake Champlain and Other Inland Lakes
  http://www.uvm.edu/seagrant/publications/35
- United States Army Corps of Engineers: http://www.usace.army.mil

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.19 EXTEND AREA IN WHICH THE TWO-FOOT FREEBOARD REQUIREMENT APPLIES

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Currently active
Total Possible Points: 3

A. Why is this action important?

Freeboard is the distance between the top of the lowest floor of a structure or bottom of the lowest supporting horizontal structural member and the design flood level, usually the one-percent base flood elevation. The New York State Uniform Fire Prevention and Building Code (2010) requires two feet of freeboard above the one-percent base flood elevation for one- and two-family dwellings. New, substantially damaged or substantially improved dwellings must meet the two-foot freeboard requirement. Additional freeboard, e.g., three feet above the one-percent base flood elevation could lead to significant reductions in vulnerabilities to flooding and substantial reductions in flood insurance rates.

Local governments may impose an additional, more protective freeboard requirement using one of two approaches. Local governments may amend the local building code to require additional freeboard within the special flood hazard area[1] defined by FEMA. However, such amendments must be approved by the State Fire Prevention and Building Code Council (http://www.dos.ny.gov/DCEA/code_council.html). Local governments may achieve a similar objective, without the need for Code Council approval, by identifying an area landward of the special flood hazard area, e.g., the 0.2% (500-year) floodplain, in which the two-foot freeboard requirement applies.

[1] http://www.fema.gov/floodplain-management/flood-zones

This action involves extending area in which the two-foot freeboard requirement applies to the 0.2-percent floodplain.

B. How to implement this action

To implement this action, local communities should do the following:

1. Work with coastal residents, businesses, and developers to educate them about coastal flooding and the need for resilient building standards
2. Pilot a freeboard program by offering incentives such as reduced building fees or streamlined permitting for meeting elevation requirements
3. Develop and adopt a formal freeboard policy requiring all new or significantly renovated properties be elevated to more than two feet above the 1-percent flood elevation, or extend the area in which the two-foot freeboard requirement applies to the 0.2-percent flood elevation through local zoning or an ordinance
4. Monitor progress and effect of freeboard requirement in reducing damages

As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs. In general, a community can expect to make progress on the educational element of this action within three to six months and progress in creating and implementing the freeboard policy within six-twelve months. This strategy should have minimal additional costs and resource needs for the community.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable local governments with zoning authority, i.e., villages, cities and towns. The departments or people responsible for building and planning are most appropriate to lead this effort. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Points for this action are achieved by creating a council approved freeboard policy and demonstrating enforcement of the policy. This action will receive points as long as it remains active. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

F. What to submit

A copy of the enhanced freeboard policy, approved by the Codes Council, or a copy of the ordinance, building code or zoning change demonstrating that the 2-foot freeboard requirement has been extended to the 0.2-percent flood level, should be submitted.

G. Links to additional resources or examples

- DEC, Floodplain Management: http://www.dec.ny.gov/lands/24267.html
- FEMA, Floodplain Management: http://www.fema.gov/floodplain-management

- NOAA, Storm Smart Coasts: http://stormsmartcoasts.org, and http://www.riema.ri.gov/prevention/floods/floods_documents/Raise%20Your%20Home%20Value.pdf

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.20 REQUIRE CONSIDERATION OF SEA-LEVEL RISE IN PLANNING COASTAL DEVELOPMENT

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Any time prior to the application date
Total Possible Points: 3

A. Why is this action important?

New York's coastal areas include the shoreline of Long Island, eastern Westchester County, New York City and the Hudson estuary to the Federal Dam at Troy. Climate change is leading to notable changes in sea levels along the New York coastline. With rising sea levels come enhanced storm surges, greater likelihood of localized and regional erosion, flooding and permanent inundation. In order to ensure that buildings and infrastructure are prepared for existing as well as future changes in sea level, all planning and projects in coastal areas should take sea-level rise projections into account.

B. How to implement this action

To implement this action, coastal communities should:

1. Work with coastal residents, businesses and developers to educate them about the importance of preparing for sea-level rise and enhanced storm surge as a result or rising water levels and stronger storms.
2. Develop standards for planning and evaluating projects based on present risk and future risk from rising sea levels in coastal areas. Ensure the most up to date projections are used.
3. Update the local zoning and building code to require that new coastal development or major coastal renovations integrate sea-level rise considerations. Consider other tools like density restrictions, setbacks, height limitations or requirements for upgrading or rebuilding significantly damaged properties in vulnerable coastal areas. Any amendments to local building codes must be approved by the State Fire Prevention and Building Code Council (http://www.dos.ny.gov/DCEA/code_council.html).
4. Enforce policy and monitor compliance

As with any change in local laws and policies, please consult with the local government attorney for guidance on drafting and enacting the new legislation or policy.

C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs. In general, a community can expect to make progress on the educational

element of this action within three to six months and progress in creating and implementing the zoning or building code update within nine to twelve months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments or people responsible for building and planning are most appropriate to lead this effort. Cross-department involvement and support are recommended. Municipal committees, such as CSC task forces, conservation advisory councils or environmental conservation committees may also be involved.

E. How to obtain points for this action

Points for this action are achieved by updating the local zoning and/or building code to incorporate sea-level rise projections and demonstrating enforcement of the policy. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

	Possible Points
• Create or update a zoning or building code to incorporate vulnerability from sea-level rise	2
• Demonstrate enforcement of new zoning or building code	1

F. What to submit

A copy of the approved zoning code and/or building code that incorporates sea-level rise projections should be submitted. This action may have been completed at any time prior to the application date to be eligible for points.

G. Links to additional resources or examples

- DEC, Sea-level Rise: http://www.dec.ny.gov/energy/45202.html
- DEC, New York State Sea-Level Rise Task Force Report: http://www.dec.ny.gov/energy/67778.html
- Georgetown Climate Center, Sea-level rise Toolkit: http://www.georgetownclimate.org/sites/default/files/Adaptation_Tool_Kit_SLR.pdf
- Kingston, NY, Waterfront Flooding Task Force Final Report: www.kingstoncac.org
- Climate Central, Surging Seas: Sea-level rise Risk Analysis: http://sealevel.climatecentral.org/
- NYS 2100 Commission Report: http://www.governor.ny.gov/assets/documents/NYS2100.pdf

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.21 RIGHT-SIZE BRIDGES AND CULVERTS, AND REMOVE UNNECESSARY AND HAZARDOUS DAMS

Pending finalization of review procedures, documentation of this action cannot be accepted at this time.

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 5

A. Why is this action important?

Improperly sized culverts and bridges can contribute to localized flooding near stream-road crossings, and present a hazard to the community if they are routinely overtopped or blowout. Intense precipitation can cause more water and debris to be carried by streams, potentially resulting in jams, overflows and blowouts at culverts and bridges that are too small. Many culverts also act as barriers to aquatic animals, including fish. Right-sizing bridges and culverts help to protect stream continuity, reduce flooding and connect aquatic habitat. The goal of these right-sizing projects is to maintain or restore pre-installation conditions as much as possible.

Many dams in New York State are not properly maintained and past their engineered lifespan. They can present a flooding hazard to upstream communities and, in the event of a dam failure, to downstream communities as well. Some dam owners are interested in removing their dam if the right support and resources are offered. Dam removal, where appropriate, can reduce the possibility of dam failure and reconnect streams for animals, including fish.

B. How to implement this action

Points for this action are obtained by:

Culverts

- Identify stream crossings that have caused flooding or may cause flooding in the future due to changes in precipitation from climate change or changes in upstream land use. Use a watershed assessment, if one exists, to identify problem areas. When evaluating sites, consider the larger watershed context and effects both up and down stream. Problems could arise from the following:
    - Undersized crossings
    - Shallow crossings
    - Perched crossings
    - Multiple culverts at one stream crossing
- Work with local soil and water conservation districts, qualified engineers and regional staff from DEC to design the appropriate type of stream crossing and minimizes impact to the stream. Use open-bottomed culverts, that span at least 1.25 times the bankfull width, where possible, to reduce barriers to aquatic life.
    - Use the most recent flow volume standards. Incorporate projections of future rainfall, if available.
- Contact DEC to determine if a permit is necessary. Permits are required for streams classified as C(T) or higher quality (ECL Article 15-0501), navigable bodies of water (ECL Article 15-0505), and DEC regulated wetlands (ECL Article 24).
- Install the right-sized stream crossing(s).

  Perform annual maintenance on all stream crossing structures and check for structural deficiencies, undermining and debris buildup.

Dams

- Create an inventory of dams in the municipality, both publicly and privately owned. Use a watershed assessment if one exists. Assess their maintenance status and the landowners' interest in dam removal.
- Prioritize removing dams where appropriate, removing the risk of dam failure and costs of future maintenance. Only upgrade and maintain dams that are serving an important community need, such as water supply, recreation, historical preservation, flood control and power generation.
- Where appropriate, work with local and regional DEC staff, town engineers and attorneys, and other stakeholders to design the appropriate dam removal strategy.

C. Timeframe, project costs, and resource needs

The timing and costs to right-size a stream crossing depend on the number of crossings to be replaced and the type of replacement involved. One crossing might be replaced in 6-8 months. Dam removal projects require several planning steps and can be lengthy process. Costs of these projects are variable, depending on the complexity of the removal strategy. An additional timing constraint involves applying for the necessary permits. Local governments will typically need to devote some staff time and capital resources for the improvement of stream crossings and removal of unwanted dams.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people responsible for public works, highways or engineering are most appropriate to lead this action, although dam removal projects will likely need help from dam removal experts outside the municipal staff. Culvert resizing should be included in municipal highway annual maintenance plans. For this effort to be successful, cross-department involvement and support are recommended. Private landowner partnerships will be needed in many cases. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees or watershed groups may also be involved. This action could be led by another organization, such as a county agency, but the local government must demonstrate substantial involvement in the effort to receive points.

E. How to obtain points for this action

Local governments can earn points for this action by conducting the necessary planning to identify appropriate dams, culverts and bridges. More points are earned upon demonstrating that a bridge or culvert has been right-sized or a dam has been removed. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation. CSCs may receive points for each dam removed and each pair of bridges or culverts right-sized over any 10-year period.

	Possible Points
• Develop a road-stream crossing right-sizing plan or strategy based on a culvert assessment to identify those that are undersized or barriers to aquatic or riparian organisms.	1
• Right-size 2 or more bridges or culverts and ensure that they are not barriers to aquatic connectivity.	1
• Conduct a dam inventory and required engineering studies for town-owned dams and others dams of interest in the community that are potentially appropriate for removal.	1
• Remove 1 dam identified by the dam inventory as appropriate for removal.	2

F. What to submit

Local governments should submit information on any plans, strategies or design documents demonstrating a plan to replace stream crossings and/or identifying dams that are appropriate for removal. For points associated with removing or mitigating aquatic barriers, local governments should submit evidence, such as before and after photographs, of the replaced stream crossing or removed dam, along with a description of the design features of the new crossing or restored stream reach.

G. Links to additional resources or examples

- DEC, Stream Crossings: Guidelines and Best Management Practices: http://www.dec.ny.gov/permits/49066.html
- DEC, Stream Crossings: Protecting and Restoring Stream Continuity. http://www.dec.ny.gov/permits/49060.html
- DEC, Dam Removal and Barrier Mitigation draft guidance: http://www.dec.ny.gov/docs/remediation_hudson_pdf/damremoval.pdf
- DEC, Environmental Resource Mapper: http://www.dec.ny.gov/animals/38801.html
- New England's Sustainable Knowledge Corridor, Best Management Practices for Stream Crossing Replacement: http://www.sustainableknowledgecorridor.org/site/sites/default/files/uploads/Climate/PVPC_ClimateActionPlan_App2_BMPs-for-Stream-Crossings_12-08-12.pdf
- Northeast Regional Climate Center, Extreme Precipitation in New York & New England: http://precip.eas.cornell.edu/

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.22 DEVELOP OR ENHANCE EARLY WARNING SYSTEMS AND COMMUNITY EVACUATION PLANS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total Possible Points: 4

A. Why is this action important?

Public safety officials and emergency managers must provide the public with life-saving information quickly in an emergency. Timely information on imminent flood hazards and extreme weather, preparedness actions and evacuation routes can speed evacuations and allow property owners time to prepare. Information on hazards from federal or state authorities, like the National Weather Service, can be enhanced by local information from stream gages (for flood flows) and weather stations and from the public via social media and telephone. Local governments should have systems in place to capture local data and transmit real-time information on hazards and preparedness actions to the public. Evacuation plans and routes should be designated across jurisdictions to ensure coordination and safe passage in an emergency.

The NY-ALERT mass notification system is available to all New York State agencies and municipalities for public safety messaging. Information from local stream gages or emergency service providers on threats from natural hazards can be disseminated quickly through the NY-ALERT system. Municipalities, working through designated county coordinators, can also disseminate emergency messages via reverse 911 phone calls to households within a specified jurisdiction or geographic area. Individual counties must request and authorize reverse 911 calling on behalf of local municipalities so coordination between the county and the municipalities is critical to the functioning of these systems in an emergency.

B. How to implement this action

Communities should coordinate with their neighbors and respective counties to develop emergency warning systems that incorporate local data sources and real-time information, develop evacuation plans and routes, and clarify procedures for the authorization of reverse 911 calling in emergencies.

C. Timeframe, project costs, and resource needs

Updating a community or county emergency and evacuation plan, including the incorporation of local and real-time data, can take 4 to 6 months, depending on the amount of time and resources available to help with plan creation.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people responsible for emergency management are most appropriate to lead this action. This action may be led by another organization, such as a county agency. The local government must demonstrate substantial involvement in a regional effort to receive points.

E. How to obtain points for this action

Local governments can earn points for this action by assessing current emergency warning systems for flooding and other natural hazards, if they exist, and implementing actions to develop or enhance these systems. Enhancements might include the use of the NY-Alert system or guidelines for using local information like stream gage data. CSCs can also obtain points for coordinating on the designation of evacuation routes and developing clear guidelines for the authorization of reverse 911 calling.

	Possible Points
• Assess current early warning systems for flooding and natural hazards	1

• Develop a new or improve an existing early warning system for flooding and natural hazards (using NY- ALERT or incorporating local data), or add local stream gages	1
• Develop evacuation routes for a variety of natural hazards across several jurisdictions	1
• Develop guidelines for the authorization of reverse 911 calling.	1

Alternatively, communities may receive full credit of 4 points for this action by providing proof of recognition as a StormReady® community by the National Weather Service.

F. What to submit

Local governments should submit information on development of a new system or enhancements to existing early warning systems, or a copy of notification from the National Weather Service that the community has been recognized as a StormReady community.

G. Links to additional resources or examples

- NYS Division of Homeland Security & Emergency Services, NY-ALERT: http://marketing.nyalert.gov/index-1.html
- US National Weather Service, StormReady: http://www.stormready.noaa.gov
- USGS, Development of a Flood-Warning System and Flood-Inundation Mapping for the Blanchard River in Findlay, Ohio. http://pubs.usgs.gov/sir/2008/5234/

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

Strategies to Address Drought

7.23 IMPLEMENT A WATER CONSERVATION AND REUSE PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total Possible Points: 5

A. Why is this action important?

Although New York State is expected to receive on average more annual precipitation, this additional precipitation is likely to come at times when it is needed least, e.g., late winter, and the frequency of short-term summer droughts is expected to increase. Efforts to reduce water consumption and utilize water more efficiently provide an opportunity to reduce our demand on water resources, reduce our energy consumption, increase resiliency to short-term drought and enhance innovation. Simple actions like adjusting the timing of outdoor sprinkler systems or installation of low-flow showerheads can help to conserve water in dry summer months. Other actions require more investment, such as the investigation and repair of leaky underground water distribution systems. Water conservation often saves money and reduces the need to find new, likely more expensive, sources of freshwater in the future.

Climate-smart land-use policies can play an important role in ensuring that drinking water supplies are replenished and streams have sufficient baseflow.

B. How to implement this action

To implement this measure, local communities can undertake the following:

- Create and implement a water conservation or reuse program within internal government operations.
- Create and implement a water conservation program within the residential, commercial and industrial stakeholders in the community. Incentivize identification and repair of underground water leaks and develop guidelines for efficient timing of sprinkler systems.
- Collaborate with water utilities to provide water conservation devices such as low-flow showerheads to residents.
- Implement a rainwater harvesting and reuse program, including the distribution of rain barrels and the promotion of cisterns and other water harvesting practices. Some water harvesting practices, especially those involving reuse of gray or black water, may be regulated by state or local codes, or industry standards. Local governments are advised to consult with appropriate code officials and other professionals before planning water harvesting and reuse programs. Any amendments to local building codes must be approved by the State fire Prevention and Building Code Council (http://www.dos.ny.gov/DCEA/code_council.html).
- Replenish groundwater supplies by using green infrastructure practices to infiltrate stormwater, using decentralized wastewater techniques and protecting natural areas.

Local governments can also implement this action by following the steps below to join EPA's WaterSense program as a promotional partner. Local governments can sign up for the WaterSense program relatively quickly, by signing the Promotional Partners Agreement. There is no cost to participate in the WaterSense program; however, local governments must demonstrate some annual promotional activities for the water efficiency. The EPA provides promotional resources and materials for the program, so there should be little or no cost to promote the program:

1. Review WaterSense program guidelines and eligibility requirements: http://www.epa.gov/watersense/partners/join.html
2. Complete and sign a Promotional Partners Agreement http://www.epa.gov/watersense/docs/ws_partnership_promo_508_2-1-13.pdf and agree to the partnership pledge, which requires the local government to educate residents, businesses, and institutions about water efficiency, undertake activities and events to achieve WaterSense goals, and provide data to the EPA on an annual basis about promotional activities.
3. Plan and develop marketing materials to promote water efficiency, WaterSense products, and the WaterSense program, using the EPA's materials
4. Hold 1 event per year in which water efficiency is promoted
5. Report to the EPA WaterSense program on an annual basis about promotional activities

C. Timeframe, project costs, and resource needs

A local government can likely complete this action within six to nine months.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The water utility is most appropriate entity to undertake this action. If a local government does not have a water utility, the department or people with the responsibility for leading the climate and sustainability efforts are most appropriate to be responsible for this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as a CSC task force or conservation advisory council. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement from local organizations such as watershed groups is recommended.

E. How to obtain points for this action

Points are obtained for this action by demonstrating the creation of or enhancement of an existing water conservation program. CSCs can also earn points by demonstrating participation in the EPA WaterSense program as a promotional partner, or committing to purchase only WaterSense labeled products for municipal facilities and operations. CSCs applying for points for participation in the WaterSense program will only be awarded points for development of additional water conservation programs that substantially exceed the requirements of the WaterSense program.

	Possible Points
• Promote water efficiency by participating in the EPA WaterSense program as a promotional partner	2
• Commit to purchasing only WaterSense-labeled products for municipal facilities.	2
• Develop a water conservation program for government facilities	1
• Develop a water conservation program for the community	1

F. What to submit

Progress reports indicating the number and types of water conservation strategies underway and any metrics on the amount of water reduced. In addition, community outreach materials related to water conservation should be submitted as part of this element. The water conservation program must be currently active to be eligible for points. To demonstrate participation in the WaterSense program, submit a copy of the completed Promotional Partnership Agreement (http://www.epa.gov/watersense/partners/partnership_agreement.html) and of the most recent WaterSense partner annual report (http://www.epa.gov/watersense/partners/annual_reporting.html).

G. Links to additional resources or examples

- DEC, Water Use & Conservation: http://www.dec.ny.gov/lands/67073.html
- US EPA, Water Sense program: http://www.epa.gov/watersense/
- New York, NY, Water Conservation Programs: http://www.nyc.gov/html/dep/html/ways_to_save_water/index.shtml

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements. To obtain recertification credit for participation in the WaterSense program, CSCs must provide the WaterSense annual report for the most recent calendar year.

7.24 ENCOURAGE XERISCAPING

Action pathway phase: Assess, plan, and govern
Eligibility timeline: Currently active
Total Possible Points: 2

A. Why is this action important?

A changing climate will mean changes in the quality and quantity of available water supplies, with more frequent summer droughts. This will likely mean increased competition for more limited supplies of freshwater. Xeriscaping entails landscaping and gardening practices that utilize native drought-resistant vegetation and reduce or eliminate the need for supplemental water from irrigation. By ensuring that only native plants or plants that are appropriate for our climate zone are planted, we will be helping to ensure that a sustainable amount of water is used for home and business landscaping, thereby reducing competition between this and other sources of water demand. Native plant species also benefit wildlife.

B. How to implement this action

To implement this measure, local governments should do the following:

1. Provide planning and zoning board, building department staff and citizens with educational material about what xeriscaping is and what types of plants are suitable for the New York region
2. Pass an ordinance requiring xeriscaping in site plans and subdivision regulations for new residential and commercial properties

C. Timeframe, project costs, and resource needs

The costs associated with implementing this action, as well as the additional staff time needed, are minimal. A local government can likely complete this action within 6 to 9 months

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people with the responsibility for leading climate and sustainability efforts are likely to be responsible for this action. These responsibilities are typically led by the chief elected official's office and undertaken by the city manager's office, the department of the environment or planning or by a volunteer body, such as a Conservation Advisory Council. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement from local organizations or watershed groups is recommended.

E. How to obtain points for this action

Points are obtained for this action developing educational materials related to the benefits of xeriscaping or adopting and ordinance or regulation requiring or promoting xeriscaping.

	Possible Points
• Adopt an ordinance or regulation requiring or promoting xeriscaping	1
• Educate the public about the benefits of xeriscaping	1

F. What to submit

Local governments must submit certified copies of adopted ordinances or regulations requiring or promoting xeriscaping or educational materials. The ordinance may have been adopted at any time and be actively in use, and the educational materials must be actively in use.

G. Links to additional resources or examples

- United Water New York, Gardening with Less Water: http://www.unitedwater.com/newyork/ny-xeriscape.aspx
- Cornell University, *Conserve Water with Xeriscape Landscaping*: http://emergencypreparedness.cce.cornell.edu/disasters/Documents/Hort%20012%20Conserve%20Water%20with%20Xeriscape%20Gardening%20Sep%2009.pdf

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

7.25 IMPLEMENT A SOURCE WATER PROTECTION PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total Possible Points: 6

A. Why is this action important?

Maintaining the long-term viability of water supply and water quality is critical to ensuring public health and safety, and to maintaining a viable local economy. Climate change will likely stress existing water supplies, necessitating strategic planning, conservation, and source water protection programs. It is critical to identify current sources of water and assess their watersheds or recharge areas to identify potential vulnerabilities (for both quality and quantity) over time.

B. How to implement this action

To implement this measure, local governments should undertake the following:

1. Identify the sources of the local public water supply, along with watersheds or recharge areas.
2. Identify climate vulnerabilities for local water supplies.
3. Work with other jurisdictions that also draw water from the water source and with communities within the source water's watershed or recharge area, to collectively identify strategies to protect source waters.

4. Create a strategy or source water protection plan considering a watershed perspective. Also, consider changes in population and development, in addition to climate change. The plan should outline specific projects to improve source protection.
5. Identify interbasin transfers (taking water from one watershed and discharging it into another) by assessing municipal, commercial, and industrial water intakes and discharge locations; limit interbasin transfers were possible.
6. Implement the plan's projects and track key indicators such as water supply and water quality.

C. Timeframe, project costs, and resource needs

A local government can likely complete the planning element of this action within 1 to 2 years. Implementation and monitoring of this action are ongoing efforts.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or people with the responsibility for managing water issues are most likely to be responsible for this action. Cross-department involvement and support are recommended, along with support and involvement from the interdisciplinary climate adaptation task force (as identified in PE 1.2). Stakeholder involvement from local organizations and watershed groups is recommended. If the sources or their watersheds/recharge areas cross municipal boundaries, communities should work with other municipalities as well.

E. How to obtain points for this action

Points are obtained for this action by submitting documentation of a source water protection plan and documentation demonstrating how the plan has been implemented. This includes specific details on the actions implemented and any metrics of success. To be eligible for points for this action, local governments are not required to incorporate these policies into their zoning or comprehensive plans; however, they are encouraged to do so to establish the legal basis for implementation.

	Possible Points
• Create a source water assessment or update existing assessments	1
• Create a source water protection strategy or plan	1
• Implement actions from the strategy or plan	3
• Track key indicators, such as water supply and quality	1

F. What to submit

Local governments should submit copies of a successfully passed source water protection plan and any documentation highlighting successfully implemented strategies identified in the source water protection plan. Local governments should also submit reports on key indicators and historical trends.

G. Links to additional resources or examples

- US EPA, Source Water Protection: http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/index.cfm

- DOH, Drinking Water Protection Program : http://www.health.ny.gov/environmental/water/drinking/
- DOH, Source Water Assessment Program: http://www.health.ny.gov/environmental/water/drinking/swap.htm
- DOH, Source Water Assessment Program Plan: http://www.health.ny.gov/environmental/water/drinking/swapp.pdf
- Trust for Public Land, Source Protection Handbook: http://www.tpl.org/publications/books-reports/the-source-protection.html
- New York Rural Water Association: http://www.nyruralwater.org/

H. Recertification Requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 8: SUPPORT DEVELOPMENT OF A GREEN INNOVATION ECONOMY

Lead and support the transition to a green economy by incorporating climate protection and sustainability into economic development plans. Create demand and offer incentives and support for local green industries and green jobs training.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 8: Support development of a green innovation economy			**56**	
Training and Education			**5**	
8.1	Create a green jobs training program	Implement	3	
8.2	Hold green vendor fairs	Implement	2	
Planning and Leadership			**9**	
8.3	Include green industries in economic development plans	Assess, Plan, Govern	4	
8.4	Incorporate sustainability requirements in local government-funded programs or projects (under development)	Implement	5	
Local Business Engagement and Support			**9**	
8.5	Adopt a green procurement policy that emphasizes local sourcing	Implement	4	
8.6	Create and promote local farmers' markets	Implement	3	
8.7	Create a "buy local/buy green" campaign	Implement	2	
Siting and Incentivizing Green Business/Industry			**21**	
8.8	Redevelop a brownfield site	Implement	10	
8.9	Establish incentives for green industry or businesses to locate in community	Implement	4	
8.10	Support alternative transportation fuel supply infrastructure	Implement	7	
Creating Demand for Green Jobs			**12**	
8.11	Adopt energy benchmarking requirements for privately owned buildings	Implement	5	

8.12	Establish a residential energy efficiency financing program	Implement	7	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

Training and Education

8.1 CREATE A GREEN JOBS TRAINING PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

An essential component of shifting to a green economy is training individuals for the jobs that such an economy will create. Green jobs can include the following, among others, each requiring new or adapted skills for a clean, green economy:

- Energy Manager
- Green Building Professional
- Renewable Energy Installer
- Recycled Materials Handler/Hauler
- Biofuels Producer
- Land-use planner
- Energy Auditor
- Clean Technology Manufacturer/Researcher/Developer
- Sustainability Educator
- Brownfield Remediation Worker

Similarly, a shift to a greener economy will require a shift in the information and skills taught in schools that prepare students for their future jobs.

B. How to implement this action

Local governments must determine the type of training that is most appropriate to the economy in their community and region. Smaller communities may seek to collaborate with neighboring communities to develop a green jobs training program that addresses the needs of the region. You must understand the job shortages in the community or region and local demand for certain green jobs or skills. Regional Economic Development Councils and associated regional economic development plans can help to inform the needs and types of programs which are most in demand locally. In addition, local governments should work with local trade organizations, vocational schools, and community colleges to survey existing training programs and gather information on the demand for new training programs. Once you have a good understanding of the demand and needs, you can develop the plans for the training program.

Local government staff should go through a "train the trainer" effort to work on greening existing job training curriculum and training staff on more sustainable approaches to be incorporated into their training programs. Implementing the green jobs training program could involve launching a whole new training course or program or updating existing training programs to incorporate sustainable principles and practices.

Local governments should track the number of attendees of the training program and, if possible, the subsequent job placement of the trained professionals. You may elect to highlight the success and impact of their training program through a press release, or possibly an event tied to a larger sustainability announcement or engagement opportunity.

Local governments can consider the expansion and improvement of existing education programs. Business owners can be educated on the benefits of investing in their workers to take advantage of market opportunities. Communication between schools and employers can be improved to support an increase in college classes, certification, and training programs. Also, programs can be tailored toward low-income workers. A "green collar" fund may be established to pay for worker training.

C. Time frame, project costs, and resource needs

The time frame and resource needs for this action depend on the approach to implementing the action, whether the approach involves developing a whole new training program, or incorporating sustainability principles and practices into an existing program. Local governments seeking to develop new training programs should seek opportunities to collaborate with other organizations such as local vocational schools or community colleges.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is relevant to any local government and would most likely be led by an economic development department or workforce development department or committee. Local school departments may also be engaged and it may be beneficial to collaborate with other non-profits or business entities within the community and work with the relevant Regional Economic Development Council. CSC can collaborate with local vocational schools and community colleges to incorporate green training into their curricula.

E. How to obtain points for this action

Points are earned for this action by establishing at least one green job or green skills training program or course per year. The program could be a single workshop that re-trains a particular profession for ways to "green" their work, or it could be an ongoing training program that introduces skills, provides hands-on training, and helps link participants to jobs. It might also be a "greening" of a curriculum or technical program within a vocational school or community college. The specifics will be dependent on the unique needs of each community.

F. What to submit

Local governments should submit documentation demonstrating that the training program occurred, such as an agenda for the training, any training materials used or provided, number of attendees (if available), and marketing materials. If the program is within an educational institution, a list of any relevant courses and or syllabi for those courses should be provided. Local governments

must demonstrate that the program is currently active and that the training course occurred within one year prior to the application date.

G. Links to additional resources or best practices

- City of New Rochelle, NY, "Green Supers" Program: http://www.newrochelleny.com/archives/43/NR-Green%20Supers%20Training%20Program%20Launched.pdf
- Association for the Advancement of Sustainability in Higher Education (AASHE) Curriculum Resources: http://www.aashe.org/resources/curriculum-resources/
- New York City, NY, Green Jobs Training Program (through NYC Brownfield Partnership): http://www.nyc.gov/html/oer/html/community/worker_training.shtml
- Green Jobs Training Center: http://greenjobtrainingcenter.com/pages/about.html
- Sustainable South Bronx Green Collar Workforce Training: http://www.ssbx.org/our-programs/best-academy-green-collar-workforce-training/
- New York State Regional Economic Development Councils: http://regionalcouncils.ny.gov/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.2 HOLD GREEN VENDOR FAIRS

Action pathway phase: Implement
Eligibility timeline: Within 1 year prior to the application date
Total possible points: 2

A. Why is this action important?

Organizing and holding a green vendor fair provides a great opportunity for local green vendors to market themselves to the community, network with each other, and educate community members about green products and services available. Supporting green vendors will support a shift to a local green economy.

B. How to implement this action

A green vendor fair can be a standalone event, or something a local government may want to do in conjunction with other environmental events, or with other regional events, or other local government partners. Depending on the size of the community and the resources available to plan the event, local governments should determine the most appropriate approach to hosting the event. Local governments will likely want to collaborate with community partners with shared objectives around promoting a green economy, and leverage the partner's resources to plan and execute the event.

Local governments will must identify and recruit vendors for the event, find a date and location for the event, and promote the event to the public. It is recommended to maintain a database of green vendors and make this information available to the public and to government contractors.

C. Time frame, project costs, and resource needs

Preparing for a green vendor fair can take four to eight months, depending on the size of the fair, availability of venues etc. Local governments can minimize costs for the event by using a government owned building for the fair and partnering with other organizations to plan and host the event. Local governments may also consider charging a fee to vendors to participate, which can offset the costs and possibly earn revenue for the community.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. It could be organized by a variety of departments, councils, or committees, such as the planning, public works, or sanitation department, a sustainability committee, an environmental committee, town council, or others. It may also be worth considering partnering with a local non-profit, the local chamber of commerce, or other neighboring jurisdictions.

E. How to obtain points for this action

Points for this action are earned by hosting at least one green vendor fair or environmental fair per year where green vendors are invited to participate and market their goods and services.

F. What to submit

Submit copies of event posters or advertisements, a list of vendors in attendance, local government departments or staff members in attendance, and an estimated number of attendees. Local governments must demonstrate that the green vendor fair occurred within one year prior to the application date.

G. Links to additional resources or best practices

- Ann Arbor, MI, Annual Mayor's Green Fair: http://www.a2gov.org/government/publicservices/systems_planning/Environment/Pages/GreenFair2009.aspx
- Boston, MA, GreenFest: http://bostongreenfest.org/about.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Planning and Leadership

8.3 INCLUDE GREEN INDUSTRIES IN ECONOMIC DEVELOPMENT PLANS

Action pathway phase: Assess, Plan, and Govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 4

A. Why is this action important?

For the purposes of this section, green industries are businesses that produce goods or provide services that benefit the environment or conserve natural resources. Such goods and services are those that support research, development or deployment of renewable sources of energy or energy efficiency; recycling; pollution prevention or abatement; reduction of greenhouse gas emissions; natural resource conservation; environmental compliance; or training and education in these fields.

CSCs can incorporate specific plans for development of green industries into their short-term and long-term economic development plans. Identifying needs for particular green industries or markets, and assessing existing assets should be part of this planning process.

B. How to implement this action

Local governments can implement this action by performing an assessment of green economy opportunities, assets, and needs in the community, setting specific goals and objectives for increasing green businesses and green jobs, and identifying initiatives for accomplishing these objectives.

It would be useful for local governments to identify the green economy sectors within their jurisdictions and high-growth employment opportunities. This can be done through a focused effort to contact green industries to help identify job shortages and needed skills. Green industry development can be tracked through workforce response teams.

A green industry-development plan could be a standalone effort or be included in an existing effort to develop or update an economic development, sustainability, or comprehensive plan. This effort could take place at the local level or the regional level, perhaps in collaboration with the regional economic development council and neighboring jurisdictions. Local governments should incorporate the relevant goals and strategies from the regional sustainability plans developed through the Cleaner, Greener Communities program.

C. Time frame, project costs, and resource needs

Most local governments will likely include this action in the scope of an existing effort to develop a new plan or update an existing plan. Thus, the additional effort to achieve this action will be minimal, if the planning process is already underway. However, if a local government elects to include an additional task in the scope of work, to perform a green economic development assessment, it could incur additional costs in staff time or consultants. The costs for such a study will vary based on the size of the jurisdiction and the number of economic sectors to be analyzed.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government and will most likely require engagement from planning staff, economic development or workforce development staff, and other relevant stakeholders from within and outside the local government. Local government economic development staff should participate in any regional effort and involve regional economic development council staff in any local efforts, as appropriate.

E. How to obtain points for this action

Points are earned for this action by incorporating baseline assessments, goals and objectives, and initiatives for developing green industries into new economic development plans or for updating existing plans with this new information.

F. What to submit

Submit a link to or copy of a formally adopted economic development plan or other plan with economic development component that has incorporated goals, objectives and initiatives for promoting development of green industries in the community. Submit a memorandum or report summarizing and pointing to the sustainability sections or actions in the plan. The plan must have been created or updated within five years prior to the application date.

G. Links to additional resources or best practices

- New York, NY, Five Borough Economic Opportunity Plan: http://www.nyc.gov/html/econplan/downloads/pdf/diversification_final.pdf
- New York State Regional Economic Development Councils: http://regionalcouncils.ny.gov/
- Albany, NY, Albany 2030 Plan: http://www.albany2030.org/learn/final-plan
- Cleaner, Greener Communities Regional Sustainability Plans: http://www.nyserda.ny.gov/Statewide-Initiatives/Cleaner-Greener-Communities/Regional-Sustainability-Plans.aspx
- Bureau of Labor and Statistics: http://www.bls.gov/green/
- EPA, Clean Energy Workforce Development: http://www.epa.gov/statelocalclimate/documents/pdf/CPPD_CE_WD_PPT_4-28-09.pdf
- EPA, Synopses of Example State Workforce Development Programs
- and Related Legislation: http://www.epa.gov/statelocalclimate/documents/pdf/background_paper_attachment1.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.4 INCORPORATE SUSTAINABILITY REQUIREMENTS IN LOCAL GOVERNMENT-FUNDED PROGRAMS OR PROJECTS

Action pathway phase: Implement
Under development

> *Pending finalization of review procedures, documentation of this action cannot be accepted at this time.*

Local Business Engagement and Support

8.5 ADOPT A GREEN PROCUREMENT POLICY THAT EMPHASIZES LOCAL SOURCING

Action pathway phase: Assess, Plan, and Govern
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

Local sourcing of goods and services reduces the total resources, particularly fossil fuel consumption, necessary to transport goods and services into the community from elsewhere. Supporting local businesses also strengthens and stabilizes the local economy and tax base and keeps jobs local.

B. How to implement this action

To implement this action, local governments need a commitment from the elected leadership to develop and implement a green procurement policy. Procurement staff will typically be responsible for developing the policy and must develop green requirements or guidelines for government specifications and contracts, standards for certain products, such as computers or printers, and processes and criteria to ensure that sustainability criteria are taken into account for all government purchases.

C. Time frame, project costs, and resource needs

Local governments should plan for approximately six to nine months to develop a green procurement policy, although this time frame will depend on staff availability and existing procurement policies. Implementing the policy will be an ongoing task, which will require some upfront training to relevant local government staff with procurement responsibilities.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. The procurement officer or purchasing department would be responsible for implementing a policy that must be drafted in coordination with all departments that purchase goods and services, and formally adopted by local government leadership.

E. How to obtain points for this action

Points are earned for this action through formal adoption and implementation of a procurement policy that emphasizes local sourcing of goods and services and is consistent with current New York State green procurement policies[1].

	Possible Points
• Adopt a green procurement policy consistent with current state policy	2
• Demonstrate implementation and compliance with the policy	2

[1] Governor Andrew Cuomo Executive Order 4 or its successor.

F. What to submit

Provide a link to or copy of the formally adopted purchasing policy. The policy could have been adopted at any time prior to the application date but must be actively in use. To receive points for implementing the policy, provide additional documentation demonstrating how the policy was incorporated into procurement decisions. A memorandum summarizing the steps taken to implement the policy is also required.

G. Links to additional resources or best practices

- New York State Executive Order 4, Establishing a State Green Procurement and Sustainability Program: http://www.ogs.ny.gov/EO/4/Default.asp
- Seattle, WA Purchasing Policy: http://www.responsiblepurchasing.org/UserFiles/File/Computers/Policies/Seattle_Purchasing_policy_2003.pdf
- Madison, WI Local Preference Purchasing Policy: http://www.cityofmadison.com/business/localpurchasing/index.cfm
- Institute for Local Self-Reliance: http://www.ilsr.org/rule/local-purchasing-preferences/
- EPA Green Purchasing Guides: http://www.epa.gov/epp/pubs/greenguides.htm

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.6 CREATE AND PROMOTE LOCAL FARMERS' MARKETS

Action pathway phase: Implement
Eligibility timeline: Within 1 year prior to the application date
Total possible points: 3

A. Why is this action important?

Support of local food production is an important piece of building a local green economy. Not only have farmers' markets become increasingly popular among consumers, they support local farmers while reducing the overall environmental footprint of food consumed within a community. Farmers' markets provide a venue in which local farmers can sell their products, connect to consumers, and establish brand recognition for their products sold in other retail venues. Farmers' markets are typically active during the growing and harvesting seasons, but winter farmers' markets have become increasingly popular as well.

B. How to implement this action

If a farmers' market does not already exist in the community, local governments are encouraged to collaborate with local community organizations, such as a chamber of commerce or business improvement district, to form and organize a farmers' market.

C. Time frame, project costs, and resource needs

The time frame to create a local farmers' market depends on the opportunities to collaborate with community-based organizations and the available resources in those organizations to assist in the creation of the market.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This is applicable to any local government. Farmers need not be from within the same community, but should be within the same region to keep sources as local as possible. Departments likely to be involved with supporting farmers' markets include environment, public works, parks and recreation, agriculture, and health. This initiative can greatly benefit from the support of a local chamber of commerce and local non-profits.

E. How to obtain points for this action

To earn points for this action, the local government must run a farmers' market or demonstrate support of the markets through financial support, making local government property available for the market, or offering other operational resources, such as waste management, safety assistance, staffing, etc. Many communities now establish systems to ensure that food stamps are accepted at local farmers' markets to ensure equitable access.

F. What to submit

Provide documentation of operation of at least one farmers' market for a minimum of 10 days per year, and an explanation and documentation of how the local government organized or supported the market(s). The market must have been active within the year prior to the application date.

G. Links to additional resources or best practices

- New York State Department of Agriculture Farmers Market Mini-Grants: http://www.agriculture.ny.gov/RFPS.html
- Farmers Market Federation of New York: http://www.nyfarmersmarket.com/
- Farmers Market Coalition: http://farmersmarketcoalition.org/
- Rutgers University Food Innovation Center: http://foodinnovationcenter.rutgers.edu/educational_resources/market/index.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.7 CREATE A "BUY LOCAL/BUY GREEN" CAMPAIGN

Action pathway phase: Implement
Eligibility timeline: Within 3 years prior to the application date
Total possible points: 2

A. Why is this action important?

While PE 8.5 encourages the local government to lead by example through local sourcing of goods and services, this action emphasizes developing a campaign to support local and green purchasing throughout the community. Creating a brand and an outreach and education campaign raises awareness of local, green purchasing for consumers. In particular, brand recognition can play a significant role in increasing consumer local, green purchasing trends.

B. How to implement this action

To implement this action, local governments should first form a team of stakeholders involved in the development and launch of the campaign. This team could include representatives from the economic development department, communications or press department, public health department, chamber of commerce, business improvement district, retailer association, agricultural committee, and local farmer coalitions. Working with a communications specialist, the team should craft a message for the campaign and develop a recognizable brand. The team should develop a campaign strategy that outlines the selected media and approaches for communicating the campaign message. Local governments may seek to advertise at local farmers markets, public events, on billboards or street furniture, through traditional direct marketing approaches, and online. Local governments may want to plan a public event to launch the campaign to increase awareness.

C. Time frame, project costs, and resource needs

Local governments should allow for several months to develop the campaign message, marketing materials, and to launch the campaign. Local governments can use their in-house press and communications staff, leverage partner organizations resources, or use an outside communications expert.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Economic development staff, chambers of commerce, agriculture committees, and local retailers would all likely be engaged in this effort. Some local governments may elect to collaborate with neighboring jurisdictions to create a regional campaign.

E. How to obtain points for this action

Points are earned for this action by establishing a formal campaign with a brand for the community or region. The campaign should support local products and services, green products and services, or both. It could also focus on food and agricultural products or other significant segments of the local or regional economy that would benefit from such a campaign. Participation in a regional campaign (across several communities) will also earn points as long as the local government is playing an active role in supporting, promoting, or administering the campaign.

F. What to submit

Local governments must submit copies of materials developed for or used in this campaign, along with a description of the level of local government engagement, documentation of branding and other marketing materials, including a link to website, if applicable, and a list of local and green vendors participating in the campaign. The campaign must have been active within three years prior to the application date.

G. Links to additional resources or best practices

- Buy Local, Pride of New York: http://www.prideofny.com/
- Community Involved in Sustaining Agriculture: http://buylocalfood.org/
- Northeast Sustainable Agriculture Working Group: http://www.nefood.org/
- Santa Monica, CA Local Business List: http://www.buylocalsantamonica.com/buy-local/

- Do It Green, Minnesota!, list of green business and services in Minnesota: http://www.doitgreen.org/directory

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Siting and Incentivizing Green Business/Industry

8.8 REDEVELOP A BROWNFIELD SITE

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 10

A. Why is this action important?

There are many aspects of redeveloping a brownfield site that make the action sustainable. It avoids the environmental impacts associated with developing on greenfield sites and puts an environmentally damaged site back into productive use. It prevents the loss of open space or land for farming, food production or other related uses and preserves the ecological benefits of these open areas, such as stormwater management and carbon sequestration. To further the benefits of brownfield redevelopment for sustainability, many communities have focused such efforts on green redevelopment, such as renewable energy installations, urban farming, green buildings, smart growth development, or green business/industry siting.

B. How to implement this action

Local governments can start the process by identifying brownfield sites for redevelopment and possible incentives to foster the development of those sites. It is recommended to develop a plan for the site(s), either as a standalone redevelopment plan or as part of a larger comprehensive or economic development plan. The New York State Department of State (DOS) administers a grant program for municipalities that provides funding to identify areas with multiple brownfields sites (Brownfields Opportunity Areas) and perform some preliminary investigation of the site contamination. If a site is government-owned, then local governments will have more control over the use of the site and may elect to issue an RFP for possible development projects on the site.

Local governments should engage the local community to gather public input on the priorities and needs for the community and the best possible use for the site.
Local governments can also consider engaging the local development community to promote the use of brownfield sites and provide training on brownfield cleanup.

Master plans or comprehensive plans should be modified as necessary to preferentially remediate and re-develop brownfields sites according to the priorities of the municipality as described in the plans.

C. Time frame, project costs, and resource needs

Developing a brownfield plan for a site or several sites could take up to a year, if the planning process involves an environmental analysis, public outreach, and a market survey. Developing a brownfield site can be a multi-year progress, but depends on the needs and demand for new development in the area.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is relevant to any community that has contaminated or potentially contaminated sites. Redevelopment of such sites will require coordination among planning staff, economic development staff, as well as remediation technical experts, and the State Department of Environmental Conservation.

E. How to obtain points for this action

Points are earned for this action by developing a brownfield redevelopment plan that emphasizes sustainable uses for brownfield site(s), cleaning up a brownfield site, or by supporting or leading the redevelopment of a brownfield site. Bonus innovation points can be earned for redeveloping a brownfield site using green building practices.

	Possible Points
• Update an existing master plan or comprehensive plan to prioritize brownfield redevelopment	1
• Develop a site specific brownfield redevelopment plan or a strategy for multiple brownfield sites	3
• Clean up brownfield site	2
• Utilize green redevelopment (e.g., LEED) or green remediation techniques (e.g., DER-31 or ASTM Standard Guide for Greener Cleanup (WK35161))	2
• Use the brownfield site for green industry or green business siting	2

F. What to submit

Local governments should submit a copy of a brownfield redevelopment plan and documentation demonstrating the completion of a brownfield redevelopment project. The brownfield redevelopment plan or project must have been completed within the last ten years.

G. Links to additional resources or best practices

- DEC, Brownfield Redevelopment Toolbox: http://www.dec.ny.gov/docs/remediation_hudson_pdf/bftoolbox.pdf
- DOS, Brownfield Opportunity Area Program: http://www.dos.ny.gov/communitieswaterfronts/brownFieldOpp/index.html
- DOS, Brownfield Opportunity Areas Grants: http://www.dos.ny.gov/communitieswaterfronts/grantOpportunities/boagrants.html
- DEC, Green Remediation Policy (DER-31): http://www.dec.ny.gov/regulations/2393.html
- U.S. EPA, Sustainable Reuse of Brownfields: http://www.epa.gov/brownfields/policy/initiatives_sb.htm#reuse
- U.S. EPA, Brownfields to Brightfields Initiative: http://www.epa.gov/swerosps/bf/partners/brightfd.htm
- U.S. EPA, Brownfields and Land Revitalization: http://www.epa.gov/brownfields/index.html
- American Planning Association, "Creating Community-Based Brownfield Redevelopment Strategies": http://www.planning.org/research/brownfields/
- DEC, Environmental Cleanup & Brownfields: http://www.dec.ny.gov/chemical/brownfields.html
- New York City Office of Environmental Remediation: http://www.nyc.gov/html/oer/html/home/home.shtml
- ASTM International, New Practice for Greener Site Assessment and Cleanup: http://www.astm.org/DATABASE.CART/WORKITEMS/WK35161.htm
- Guidance for Federal Agencies on Sustainable Practices for Designed Landscapes http://www.whitehouse.gov/administration/eop/ceq/sustainability/landscaping-guidance

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.9 ESTABLISH INCENTIVES FOR GREEN INDUSTRY OR BUSINESSES TO LOCATE IN THE COMMUNITY

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

A common local government strategy to promote economic development is to develop incentives to attract businesses to locate within a community. For this action, the emphasis is on attracting green

industries or businesses to further promote a green local economy[2]. Communities have several methods they can employ to support the development of their green economy, such as establishing green enterprise zones, providing local government property to be used as a business incubator, providing tax incentives for green business to locate in the community or designated zone, microloans for startups, or expedited permitting processes.

B. How to implement this action

Local governments should initiate this action by performing an assessment of the needs, available skills, and opportunities for green industry in their community. Then the community can develop a plan and the appropriate suite of incentives for attracting green industry. Local governments may elect to establish a green enterprise or green development zone, which would require revising local zoning and designating the types of businesses or industry that qualify and the types of incentives provided for siting the business in that zone. Such zones could include recycling market development zones (RMDZ) that emphasize incentives for businesses that are diverting waste from landfills and creating new markets for recycled or reused materials.

Communities could also consider establishing a business incubator for small start-up green businesses that could use free or affordable space to launch their business. Microloans are other financial incentives local governments can offer green businesses to encourage them to locate in the community.

C. Time frame, project costs, and resource needs

The time frame for developing and implementing green business incentives varies with the type of incentive. The costs of the incentive also vary and in some cases will require startup costs or funding for a business incubator or microloan program. For tax incentives, local governments will forgo future tax revenue to encourage job growth.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This is applicable to any local government. It should involve planning staff, economic development staff, and in many cases, coordination with the local industrial development agency (IDA) or economic development corporation.

E. How to obtain points for this action

Points are earned for this action by establishing incentives for green businesses to locate within the community. Incentives could be financial, such as development-fee waivers, or non-financial, such as expedited permitting or density bonuses. This action may also take the form of collaboration to support a clean-tech or green-business incubator program. Local governments must demonstrate the implementation of at least one green industry incentive.

F. What to submit

Documentation should be submitted on the incentives established, including any policies or ordinances adopted as well as the criteria used to determine applicability of such incentives. Incentives for green industry may have been established any time prior to the application date and must be actively in use.

[2] See description of green industries and businesses in 8.3.

G. Links to additional resources or best practices

- New York City, NY, Economic Development Council, Clean Technology and Energy: http://www.nycedc.com/industry/clean-technology-energy
- Business Incubator Association of New York State: http://bianys.com/clean_energy_incubators
- NYSERDA Energy Innovation and Business Development: http://www.nyserda.ny.gov/Energy-Innovation-and-Business-Development/Innovation-and-Business-Development.aspx
- Wilmington, OH Green Enterprise Zone: http://www.egovlink.com/public_documents300/wilmington/published_documents/Economic%20Development/GEZ%20Frequently%20Asked%20Questions.pdf
- Sacramento, CA: http://www.cityofsacramento.org/econdev/opportunity-areas/cleantech-enterprise-zone.cfm
- CalRecycle RMDZ: http://www.calrecycle.ca.gov/rmdz/
- N REL, Jobs and Economic Development Impact Models, http://www.nrel.gov/analysis/jedi/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.10 SUPPORT ALTERNATIVE TRANSPORTATION FUEL SUPPLY INFRASTRUCTURE

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 7

A. Why is this action important?

Central to any economy is the transport of goods and people from one place to another. One way to promote a green economy is to ensure that the transport of people and goods is done in a sustainable way. Actions related to public transit, bike and pedestrian infrastructure are discussed within other pledge elements, but investment in alternative fuel supply infrastructure is a way to support green transportation while also boosting the local economy. As demand for alternative fuels rises, providing the infrastructure and supply for such fuels is a great opportunity to generate revenue, create local jobs, and promote sustainable transportation.

B. How to implement this action

The first step in implementing this action is assessing the demand for and feasibility of an alternative fueling station. Local governments should gauge local and regional demand for alternative fueling stations and consider the most appropriate fuel type for the area. Alternative fuel supply infrastructure could include the following:

- Electric vehicle supply equipment
- Compressed natural gas (CNG) infrastructure for fleets
- Biofuels production and supply infrastructure

- Propane fueling infrastructure
- Ethanol fueling infrastructure

Local governments can support the development of alternative fueling stations in a variety of ways:

- Provide incentives for alternative fuel supply infrastructure in designated zones
- Expedite permitting for alternative fuel supply infrastructure
- Amend building code or zoning ordinances to require electric vehicle charging stations in parking lots

C. Time frame, project costs, and resource needs

The time frame to implement this action depends on the scope and approach to developing an alternative fueling station. Local governments should allow for a year to 18 months to perform a feasibility study, develop a plan, and implement the plan.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action may not be applicable to all local governments and most likely only certain alternative fuel markets will be relevant to certain locations. It is recommended that the local government conduct feasibility studies to determine which markets may or may not have a demand locally and regionally.

E. How to obtain points for this action

Points for this action are obtained through local government support of alternative fuel supply infrastructure development, through one or all of the approaches discussed above or other policy or programmatic approaches. To earn points for this action, local governments should provide documentation demonstrating what policies or incentives have been implemented to encourage the development of alternative fueling stations.

	Possible Points
• Provide incentives for alternative fuel supply infrastructure in designated zones	2
• Expedite permitting for alternative fuel supply infrastructure	2
• Amend building code or zoning to require electric vehicle charging stations in parking lots	3

F. What to submit

Local governments must submit documentation for the policies or incentives that have been developed. The policies, incentives, or code updates could have taken place at any time prior to the application date.

G. Links to additional resources or best practices

- Climate Smart Communities, Land Use and Transportation Planning Toolkit: http://www.dec.ny.gov/energy/85125.html
- NYSERDA transportation and alternative fuel programs: http://www.nyserda.ny.gov/Research-and-Development/Transportation.aspx

- New York State Transportation Fuels Infrastructure Study: http://www.nyserda.ny.gov/Energy-Prices-Data-and-Reports/EA-Reports-and-Studies/~/media/Files/Publications/Energy-Analysis/nys_transportation_fuels_study.pdf
- US Department of Energy, Alternative Fuels Data Center: http://www.afdc.energy.gov/fuels/
- Clean Cities Coalition: http://www1.eere.energy.gov/cleancities/
- Albany, N.Y., Electric Vehicle Feasibility Study: http://www.albanysustainability.org/documents/Albany_EV_Final%20Plan.pdf
- Exploring Electric Vehicle Adoption in New York City: http://nytelecom.vo.llnwd.net/o15/agencies/planyc2030/pdf/electric_vehicle_adoption_study.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Create Demand for Green Jobs

8.11 ADOPT ENERGY BENCHMARKING REQUIREMENTS FOR PRIVATELY OWNED BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

Creating demand for green jobs is an important way to support a green economy. One way to increase that demand is to require energy benchmarking for private buildings, which requires owners of buildings over a certain size to benchmark their energy use and publicly disclose the data using EPA's Energy Star Portfolio Manager tool. This requires building managers to track building energy and water use on an annual basis and enter it into EPA Portfolio Manager, and then compare the results with other comparable buildings, to benchmark the buildings performance.

B. How to implement this action

Local governments can initiate this action by forming a task force of local government staff and external experts to analyze the community's energy use and determine the most appropriate path for regulating energy efficient buildings. To date, energy benchmarking requirements have primarily been implemented in larger urban communities, particularly those with larger commercial buildings, including New York, Philadelphia, Boston, San Francisco, Minneapolis, and Washington D.C. However, smaller communities should consider opportunities to implement a policy relevant to their jurisdiction.

To implement an energy benchmarking program, local governments can use the EPA Portfolio Manager and Energy Star systems as the framework for their programs but must define building size thresholds and the type of buildings covered by the mandate. Local governments are encouraged to

engage the real estate development and building owner communities to develop the benchmarking requirements. Communities that have already implemented mandatory benchmarking have typically set a building size threshold of 25,000 square feet.

Any amendments to local building codes must be approved by the State fire Prevention and Building Code Council (http://www.dos.ny.gov/DCEA/code_council.html).

C. Time frame, project costs, and resource needs

Implementing an energy benchmarking requirement can take approximately a year, to develop and adopt the legislation, train building owners, and establish any enforcement policies and procedures. Local governments will likely incur some costs in managing and implementing the program, and building owners that do not have robust energy management systems may incur additional costs in implementing new systems to track energy data.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is primarily applicable to larger urban communities; however, smaller jurisdictions or counties are encouraged to identify opportunities to implement a similar program or requirement. The planning or buildings department will most likely be responsible for implementing this action.

E. How to obtain points for this action

Points are earned for this action through formal adoption and implementation of a benchmarking requirement applicable to all buildings larger than the selected threshold. Owners of affected buildings must monitor and publicly disclose their energy use. The selected size threshold must be no greater than 50,000 square feet. Implementation requires identification of affected buildings and development of a mechanism to ensure public reporting of their energy use.

	Possible Points
• Adopt an energy benchmarking requirement for private buildings	2
• Implement the energy benchmarking requirement for private buildings	3

F. What to submit

Documentation of formal policy or code adoption as well as details on how it is being implemented and enforced. The benchmarking requirement may have been adopted at any time prior to the application date but must be actively in use to receive full points for this action. Documentation of implementation must include copies of public reports of energy usage as provided for at least one building of a size greater than the selected threshold.

G. Links to additional resources or best practices

- EPA, ENERGY STAR Portfolio Manager: http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager
- Seattle, WA, Energy Benchmarking and Reporting Program: http://www.seattle.gov/environment/benchmarking.htm
- District of Columbia, Energy Benchmarking: http://green.dc.gov/energybenchmarking

- New York, NY, Benchmarking: http://www.nyc.gov/html/dob/html/sustainability/benchmarking.shtml
- Minneapolis, MN, Building Rating and Disclosure Policy: http://www.minneapolismn.gov/www/groups/public/@regservices/documents/webcontent/wcms1p-102210.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

8.12 ESTABLISH A RESIDENTIAL ENERGY EFFICIENCY FINANCING PROGRAM

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 7

A. Why is this action important?

Creating a demand for green jobs is an important way to support a green economy. Much of that demand can come from the residential sector as consumers seek to make improvements to their homes to lower energy costs. A challenge for implementing home energy upgrades is the upfront cost to do so. Local governments have increasingly been finding ways to support energy efficiency in their communities through financing mechanisms that help minimize those upfront costs.

B. How to implement this action

Local governments have developed creative approaches in recent years to promote, accelerate, and incentive residential building retrofit projects. Options for such a program could include, but are not limited to, the following:

- Establish a residential property-assessed clean energy (PACE) financing program (pending resolution of FHFA rule and federal legislation)
- Use a qualified energy conservation bond (QECB) to implement a residential energy efficiency financing program
- Establish an energy revolving loan fund
- Collaborate with local lenders to establish and promote energy-efficient mortgages
- Introduce on-bill financing

CSCs interested in advancing residential building retrofit projects should determine the best approach for supporting homeowners in their communities and consider initially piloting a program before launching it more broadly. Smaller communities may want to consider collaborating to develop a regional program to leverage resources and achieve greater economies of scale.

C. Time frame, project costs, and resource needs

Developing a residential energy efficiency financing program can take one to two years, depending on the level of effort to plan the program, organize partners, and develop the procedures for administering the program. If the local government seeks to administer the program, start-up costs and management costs will be incurred.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Responsibility for implementation will likely require interdepartmental coordination, including planning staff, budget and finance staff, grant administrators, local government utilities and will likely benefit from coordination with local financial institutions and the state.

E. How to obtain points for this action

Points are earned for this action through creation of a financing mechanism that provides assistance to community homeowners in upgrading their homes for energy efficiency.

	Possible Points
• Adopt a residential energy efficiency program ordinance, plan, or policy	2
• Develop and launch a residential energy efficiency financing program	5

F. What to submit

Local governments should submit documentation demonstrating that the residential retrofit financing program has been established, and to receive full credit, it must be operational.

G. Links to additional resources or best practices

- US Department of Energy Financing Programs: http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/financingprograms.html
- Long Island Green Homes: http://ligreenhomes.com/
- NYSERDA Residential Energy Efficiency and Renewables programs: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Residential.aspx

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 9: INFORM AND INSPIRE THE PUBLIC

Lead by example. Host events, organize educational programs, and support websites and social media outlets that publicize local government commitment to reducing energy use; saving tax dollars, reducing, reusing, and recycling materials; and adapting to a changing climate. Encourage citizens to follow suit.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 9: Inform and inspire the public			**18**	
9.1	Create a climate change education, outreach, and engagement program, focusing on mitigation and adaptation	Build Capacity	4	
9.2	Create and support an energy reduction campaign or challenge	Implement	5	
9.3	Host climate related educational seminars, workshops, conferences, or fairs	Implement	3	
9.4	Maintain a website on local climate action efforts	Implement	3	
9.5	Use social media to inform the community about the progress of local government's efforts	Monitor and report	3	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

9.1 CREATE A CLIMATE CHANGE EDUCATION, OUTREACH, AND ENGAGEMENT PROGRAM, FOCUSING ON MITIGATION AND ADAPTATION

Action pathway phase: Build capacity
Eligibility timeline: Currently active
Total possible points: 4

A. Why is this action important?

Public education, outreach and engagement are critical to preparing the public for the potential effects of climate change and to enlist the public in taking steps to reduce their GHG emissions. Education, outreach and engagement can be performed by a local government, but can also be effectively accomplished through partnerships with regional entities and local stakeholder groups. Education, outreach and engagement also provide an opportunity to collaborate with nontraditional stakeholder groups, to discuss co-benefits of mitigation and adaptation actions, and to identify new and innovative ways to build community resilience to climate change and reduce GHG emissions.

B. How to implement this action

Local governments can follow the guidelines below to develop and implement a climate change mitigation and adaptation education, outreach, and engagement program.

1. Formally establish a climate-change mitigation and adaptation public outreach, education, and engagement program. Ensure the program has associated goals and objectives and that the program design aims to achieve those objectives. Some local governments may elect to incorporate climate-change education, outreach, and engagement into existing programs or plans, while others may choose to treat it as a separate engagement opportunity.
2. Conduct trainings to educate local government staff on climate change, how to communicate about climate change, and how they can integrate climate into their existing projects or programs.
3. Collaborate with local stakeholder groups to engage with and educate high-risk groups about the impacts of climate change and individual actions residents and businesses can take to prepare. Potential adaptation activities will likely evolve through dialogue with stakeholders, such as those in the agriculture sector, coastal businesses, mobility-restricted populations, and others.
4. Ensure that materials are printed in several languages and accessible for a wide-array of reading levels.
5. Develop a website for communicating information to the public about climate change, and the steps residents and businesses can take to reduce GHG emissions and prepare for the effects of potential extreme weather events as well as gradual changes.
6. Collaborate with existing public health community outreach, education, and engagement efforts, and ensure that climate-change considerations are integrated into their efforts.
7. Coordinate with public health officials and emergency responders and other community stakeholders as appropriate to widely disseminate key information. Potential partners include religious institutions, academia, neighborhood associations, professional societies, schools, the YMCA, and other membership associations.

These guidelines are a starting point, and can be tailored to meet the needs of each community as appropriate.

C. Time frame, project costs, and resource needs

Implementing a climate-change public engagement program is an ongoing effort that can either be incorporated into existing efforts or managed independently from other engagement programs. The costs to achieve this action can be modest and more can be achieved by collaborating with organizations and leveraging existing efforts. The earlier community engagement occurs, the more likely efforts will succeed and strategies will be well received and achievable.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the department of the environment or planning. Cross-department involvement and support, especially with environmental educators, is recommended.

E. How to obtain points for this action

To obtain points for this action, the local government must have established a climate-change education, outreach, and engagement program and demonstrated that a variety of stakeholders have been contacted and engaged in various community efforts, such as public meetings, targeted stakeholder meetings, educational materials, or through other approaches. For example, early on, it may be useful to conduct focus groups, interviews or surveys to learn more about baseline understanding of the issues and perceptions and beliefs about effects of a changing climate in the community. To receive full credit for this action, local governments must demonstrate that the engagement program has covered both mitigation and adaption.

	Possible Points
• Climate mitigation education, outreach, and engagement activities	2
• Climate adaptation education, outreach, and engagement activities	2

F. What to submit

Local governments should submit documentation illustrating recent (i.e., within one year prior to the application date) outreach or engagement efforts related to climate change adaptation and key community vulnerabilities, such as meeting minutes, summaries of information gathered from the community, copies of webpages, educational materials, presentations or other documentation. Local governments are encouraged to provide additional documentation demonstrating how the program is currently active, such as with any plans for future events or efforts.

G. Links to additional resources or examples

- DEC, Climate Change Information Resources: http://www.dec.ny.gov/energy/50399.html
- DEC, Student Information of Climate Change: http://www.dec.ny.gov/energy/43107.html
- DOH, Climate, Weather and Health: http://www.health.ny.gov/environmental/weather/index.htm

- DOT, Climate Change and Energy Efficiency Initiative: https://www.dot.ny.gov/programs/climate-change
- NYSERDA, ClimAID Report: http://nyserda.ny.gov/climaid
- NOAA, Agriculture: http://www.climate.gov/#understandingClimate/climateAndYou/agriculture
- Center for Climate Change Communication: http://www.climatechangecommunication.org
- Cornell University Climate Change Resources for NYS: http://blogs.cornell.edu/climatechange/resources/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

9.2 CREATE AND SUPPORT AN ENERGY REDUCTION CAMPAIGN OR CHALLENGE

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 5

A. Why is this action important?

Energy reduction campaigns or challenges engage residents and businesses in creative ways to reduce their energy use and associated GHG emissions. Research shows that humans are more likely to participate in a program or activity if they are comparing themselves to someone else or somehow being held accountable for their actions. Energy reduction campaigns like the "10% Challenge" or "Energize NY" encourage residents, for example, to pledge to reduce their energy use by taking small steps like walking to work, turning down the thermostat, or replacing light bulbs with more efficient lights. They then are asked to report on their progress. An energy reduction challenge encourages residents and/or businesses to compete against their peers to see who can reduce to most energy through a variety of actions. A challenge is typically a more structured program with specific actions that participants can implement, with defined reporting requirements.

B. How to implement this action

Local governments should create an energy challenge or campaign that targets the sectors (e.g., residential, commercial) that use the most energy or have the most potential for emissions reductions. Creating an energy campaign or challenge may involve:

1. Engaging or creating an advisory committee comprised of key stakeholders (e.g., commercial property owners ought to serve on an advisory committee for a commercial office energy reduction campaign).
2. Researching existing energy campaigns for the region, state, and country and identifying relevant best practices to use for the local campaign or challenge.
3. Developing the campaign or challenge with input from the community task force or other partners.

4. Determining the best mode of administering the campaign or challenge (e.g., creating a new webpage on the local government website or an entirely new brand and web presence for the campaign or challenge).
5. Creating the campaign or challenge framework, goals, and materials that may include a checklist, an online tool, and guidance for participating in the challenge or campaign.
6. Soliciting participation from the target audience to pilot the challenge or campaign.
7. Organizing an official challenge or campaign launch hosted by the highest elected official.
8. Organizing an educational presentation series for participants, to maintain involvement in the program and share best practices.
9. Ask the highest ranking elected official to launch the challenge or campaign—consider hosting it on a milestone such as Earth Day or the anniversary of the release of the climate action plan.

Alternatively, the local government can actively support or promote to its community an existing energy challenge or campaign of another organization or community. Active promotion would include an official launch and development or dissemination of marketing materials.

C. Time frame, project costs, and resource needs

The time frame for creating and piloting the challenge or campaign is based on the scale and scope of the challenge or campaign, and will likely take about one year. Project costs may include staff time, hiring third parties to develop the website and campaign or challenge tool, marketing materials, meeting materials (e.g., space, food, beverage, IT equipment), and awards. Resource needs may include IT equipment and a webpage or website to serve as the home of the challenge or campaign. For supporting another organization's campaign, the project costs would involve staff time and potentially the development of marketing materials.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning.

E. How to obtain points for this action

Points are earned by creating an energy reduction campaign or challenge that was completed within one year prior to the application date or is currently active. The campaign or challenge can be geared toward businesses, residents, institutions, or open to any type of participant within the community.

F. What to submit

Local governments must submit one of or a combination of the following materials to demonstrate that the energy challenge or campaign is either currently active or completed within one year prior to the application date:

- Challenge or campaign website address
- Guidance document

- Marketing materials
- Challenge or campaign progress reports with results

G. Links to additional resources or best practices

- ICLEI Green Business Challenge: http://www.icleiusa.org/climate_and_energy/green-business-challenge
- ENERGIZE New York: http://energizeny.org
- Albany, NY, Green Business Challenge: http://www.albanysustainability.org/businesses.asp
- Lowell, MA, Green Restaurant Program: http://lowellgreenrestaurant.wordpress.com
- Chicago, IL, Green Office Challenge: http://chicagogoc.com/
- Walk/Ride Day, Green Streets Initiative: http://gogreenstreets.org/
- Bedford, NY, Energize Bedford: http://energizebedford.org/
- ICLEI blog post about Climate Idols, an energy challenge between households in Duluth, MN, and Thunder Bay, Ontario: http://www.icleiusa.org/blog/archive/2011/04/01/201cclimate-idol-challenge201d-links-duluth-with-sister-city
- Lawrence Berkeley National Laboratory , Driving Demand for Home Energy Improvements: http://drivingdemand.lbl.gov

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

9.3 HOST CLIMATE RELATED EDUCATIONAL SEMINARS, WORKSHOPS, CONFERENCES, OR FAIRS

Action pathway phase: Implement
Eligibility timeline: Within 1 year prior to the application date
Total possible points: 3

A. Why is this action important?

Local governments cannot achieve energy and climate goals without the community's participation. The residential and commercial sectors are two large sources of GHG emissions. It is important to educate residents and business owners on energy and water conservation, waste and vehicle miles traveled reductions, and other issues related to climate action. Educating and engaging the public will increase awareness of the benefits of individual action, and will help to further the community's climate action goals.

B. How to implement this action

Local governments may collaborate with groups such as local nonprofits, academic institutions, trade associations, or companies to deliver educational seminars, workshops, conferences, fairs, or components of these events, to engage the public in the local government's energy and climate efforts. Consider which existing (or new) workshops, conferences, fairs, and events the local government may expand to address topics such as the following:

- Energy efficient appliances for residential and commercial buildings
- Onsite renewable energy production
- Weatherization of a residential building
- Creating a recycling and composting system at home or the office
- Safe bike commute in all seasons and bike safety
- Reducing water use in the home and office
- Adapting to increased health risks related to climate change

Local governments should endeavor to reduce waste and energy use to the greatest extent possible for these events and provide recycling at the events.

C. Time frame, project costs, and resource needs

This action may be implemented as a single-day event or may take place over the course of a year. Project costs may include staff time, volunteer time, marketing materials, booth and registration fees, honoraria for speakers, and food and beverages for the audience. Information-technology resources may be required to implement this action.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. It may be organized by a variety of departments, councils, or committees, such as the CSC task force, planning department, department of public works or recycling division, a sustainability committee, or an environmental committee.

E. How to obtain points for this action

Points can be earned by hosting a single event, or series of events focused on relevant GHG reduction, climate adaptation, or general sustainability themes. Types of events could include seminars, workshops, conferences, summits or fairs. Local governments can receive points for this action if they are the lead organizer or a supporting participant in an event organized by a partner organization. The event must have been held within one year of prior to the application date.

F. What to submit

Local governments must submit documentation (e.g., agenda, website post, educational materials distributed at the event) that includes the topic, date, time, location, subject, and partners of the educational and outreach effort held within the past year.

G. Links to additional resources or best practices

- New York, NY, Green Festival: http://www.greenfestivals.org/nyc
- Regional Leadership Summit 2012: http://cleanergreenerny.org/

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

9.4 MAINTAIN A WEBSITE ON LOCAL CLIMATE ACTION EFFORTS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Using the Internet is a convenient and low-cost way to deliver information about the local government's energy and climate efforts to the public. Residents, businesses and other stakeholders can learn about their local government's climate action efforts, review progress reports, learn who is involved in the planning process, understand their role in achieving the local government's climate action goals, and learn about upcoming educational events and meetings from websites.

B. How to implement this action

Create a webpage on an existing website or create a new website dedicated to the local government's energy and climate efforts. Information or features to incorporate into the website can include the following:

- Reports (e.g., GHG emissions inventory reports, progress reports)
- Plans (e.g., a climate action plan or comprehensive plan with components focusing on energy and climate)
- List of internal and external advisory committee members
- Sponsors and partners
- Calendar of events related to the actions in the plan hosted by the local government or a third party such as a local non-profit
- CSC task force meeting minutes
- Actions residents and businesses can take to reduce GHG emissions and enhance resilience
- Webpage or form for people to enter feedback and ideas
- Risk and vulnerability maps and tracked indicators
- Local, state, national, and international resources and links

Local governments ought to consider staff capacity to build and maintain these sites and well as whether the local government has the technical expertise to build the site or if the local government must hire a third party to build the site.

C. Time frame, project costs, and resource needs

Implementing this action may take a couple months to a year depending on whether the local government seeks to create an entirely new website with a new design, or webpages as part of the government's existing website. The number of pages and functionality of the site will also dictate the cost and time frame for building the site. Project costs may include staff time, consultants' time, volunteer time, and hosting the website. Local governments should assign a staff member to regularly monitor the site and update the site's content.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. Other potentially responsible departments could include the chief elected official's office, environmental educators or public affairs specialists, or the departments of environment or planning.

E. How to obtain points for this action

Points are earned by creating a website that is actively updated and communicates the local government's commitment to climate action and how residents, businesses and other stakeholders can engage in addressing that commitment. The website must include the following components, at a minimum:

	Possible Points
• Description of the local government's climate-related plans, goals, and efforts	1
• Comprehensive information on what residents and businesses can do to reduce their GHG emissions and prepare for the changing climate	1
• Links to relevant plans, policies, or other documentation	1

F. What to submit

Local governments must submit a link to a webpage or website that provides information about the local government's energy and climate efforts. Local governments should demonstrate how the website meets each of the requirements for points for this action. New content must be posted to the website within the past year.

G. Links to additional resources or best practices

- Albany, NY, Mayor's Office of Energy and Sustainability: http://www.albanysustainability.org/
- New Rochelle, NY, Sustainability Page: http://www.newrochelleny.com/index.aspx?nid=346
- New York, NY, PlaNYC 2030: http://www.nyc.gov/html/planyc2030/html/home/home.shtml

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

9.5 USE SOCIAL MEDIA TO INFORM THE COMMUNITY ABOUT THE PROGRESS OF LOCAL GOVERNMENT'S EFFORTS

Action pathway phase: Monitor and report
Eligibility timeline: Currently active
Total possible points: 3

A. Why is this action important?

Social media platforms such as Facebook, Twitter, YouTube and Tumblr are used to connect audiences of all demographics, and to inform and engage the public on events as they are happening. It is important to analyze how these platforms can help the local government distribute information about the community's energy and climate efforts, and solicit participation and input from the public in real-time.

B. How to implement this action

Using social media to engage the community can be a low-cost and effective method, but it is important for local governments to consider which platform will best serve their needs as well as their capacity to build and maintain the account(s). Local governments should take the following considerations into account when deciding how to use social media:

- Who is the target audience? Which social media platforms are they most likely to use?
- What type of information must be communicated?
- Which platform(s) provide the framework to do what the local government wants to do (e.g., If the local government wants to get information out quickly in real-time, a platform such as Twitter may be useful)
- What is the staff capacity to build and maintain the accounts?
- What local, regional, or national organizations' or individuals' accounts should the local government connect to for the greatest exposure?
- At what frequency does the local government want to post content (e.g., a couple times a day, once a day, every couple days)?
- Does the press office have any requirements or policies around using social media that must be taken into account?
- What mechanisms have been established for rapid review?

Local governments should consider developing guidelines for using and managing the selected social media accounts. The guidelines should cover the process for updating the accounts, any necessary approvals for posting certain types of updates, and any standard language or communications policies relevant to using the account.

C. Time frame, project costs, and resource needs

Building a social media account can take as little as an hour or up to a few days depending on how much content the local government seeks to post and how many layers of people are involved with creating, approving, and posting content and connecting to other accounts. Costs associated with building and maintaining social media accounts may include staff time and annual fees to operate the accounts.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Departments that are most likely to be involved can vary and may include the mayor's office, sustainability or energy departments, planning departments or boards and committees that manage energy and climate efforts in the local government.

E. How to obtain points for this action

Create a social media account such as a Facebook, Twitter, YouTube or Tumblr account or other innovative methods to inform the community about local government efforts and engage the community in accomplishing the actions to which the local government has committed.

F. What to submit

Local governments must submit the web-addresses of their social media accounts and demonstrate how the accounts have been used to support energy and climate initiatives. New content must have been posted within one year prior to the application date. If applicable, local governments should submit their social media guidelines as well.

G. Links to additional resources or best practices

- Dobbs Ferry, NY, Renew Dobbs Ferry Facebook page: http://www.facebook.com/pages/Renew-Dobbs-Ferry/127823973917389
- Bedford, NY, Energize Bedford Facebook page: https://www.facebook.com/EnergizeBedford
- Albany, NY, Mayor's Office of Energy and Sustainabiliy Facebook page: https://www.facebook.com/AlbanyEandS
- Albany, NY Mayor's Office of Energy and Sustainability Twitter account: https://twitter.com/AlbanyEandS

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 10: COMMIT TO AN EVOLVING PROCESS

Monitor and report on progress toward achieving goals. Be willing to consider new ideas and adjust existing approaches. Ensure strategies and plans are up to date. Compare successes and cooperate with neighboring communities. Maintain involvement of stakeholders.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Pledge Element 10: Commit to an evolving process			**11**	
10.1	Report on progress annually	Monitor and report	4	
10.2	Update strategies and plan(s)	Assess, plan, govern	4	
10.3	Cooperate with neighboring communities and partner agencies	Build capacity	3	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

10.1 REPORT ON PROGRESS ANNUALLY

Action pathway phase: Monitor and Report
Eligibility timeline: Within 1 year prior to the application date
Total possible points: 4

A. Why is this action important?

Local climate action is an evolving process, which begins with an initial commitment, as part of Pledge Element 1, and continues with planning, implementation, and reporting. A regular reporting process helps to highlight progress and provides the opportunity to inform and engage the public and key stakeholders, while also identifying problems and opportunities to adapt existing approaches. During the implementation process, local governments must review progress to date and adjust implementation plans as necessary.

B. How to implement this action

Local governments may implement this action by releasing a progress report once a year to the public. Progress reports typically include the following information:

- Brief history of the local government's energy and climate work to date, including the following:
  - Local government operations GHG inventory results
  - Community-wide GHG inventory results
  - Local government and community-wide short-, medium-, and long-term GHG reductions
  - Priority GHG reduction actions

- Results (e.g., cost savings, GHG reduction)and implementation status (e.g., not started, in progress, complete) per action
- Challenges encountered
- Next steps
- New funding sources per action

This action is focused on developing an annual, public progress report. Local governments may want to use the same information for internal reporting and to manage implementation progress throughout the year, which could also be made available online.

C. Time frame, project costs, resource needs

The time frame for implementing this action is ongoing with a larger investment of time leading up to the release of the annual progress report and will vary greatly depending upon the complexity of content reported and local government. Local governments typically begin work on the progress report within two to three months of the targeted release date. Project costs for this action may include staff time, intern time, copy editor's time, and marketing materials.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning, with assistance from the CSC task force. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Points are earned by developing and publicly releasing an annual progress report that addresses the climate actions in the climate action plan (or another related plan), status of implementation, and any problems or implementation challenges that affect the ability to implement the stated action.

F. What to submit

Local governments must submit copies of their most recent progress reports, released within one year prior to the application date. The progress report must be a report on the local climate action plan if one exists, or other related action-oriented plan that includes substantial climate action.

G. Links to additional resources of best practices

- New York, NY, PlaNYC progress reports: http://www.nyc.gov/html/planyc2030/html/publications/publications.shtml
- Portland, OR, Climate Action Plan Progress Report: http://www.portlandoregon.gov/bps/article/327050

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

10.2 UPDATE STRATEGIES AND PLAN(S)

Action pathway phase: Assess, plan, govern
Eligibility timeline: Within 5 years prior to the application date
Total possible points: 4

A. Why is this action important?

As circumstances change and new opportunities or challenges arise, local governments must review and update climate action strategies and the associated planning documents. Regularly updating a climate action plan (or sustainability plan) ensures that it is a living document that charts the course for the local government's energy, climate, and sustainability efforts.

B. How to implement this action

The process for updating a climate action plan is similar to the process for developing an initial climate action plan. Local governments can follow the guidelines below for structuring their planning processes:

Project Mobilization:

- Convene an internal advisory committee composed of representatives from all departments
- Organize an external advisory board composed of key stakeholders (if the original advisory board remains active, review the board membership and determine if it must be modified)
- Develop a project plan and timeline for the plan update
- Develop a draft scope of work for the plan update, with key tasks and proposed updates or changes to the plan

Analyze and Develop Strategies:

- Review the strategies in the current plan and determine, based on current implementation plans, if they are sufficient to allow the community to meet its government operations and community-wide emissions reductions goals
- Adjust existing strategies and add new strategies as appropriate
- Expand the scope of the plan, as appropriate
- Review the GHG emissions reductions targets and revise or update as appropriate
- Develop a draft plan for public input

Gather Public Input:

- Perform public outreach to gather input on updates to existing strategies and new strategies
- Use a variety of outreach methods to engage the public, such as town hall meetings, social media, direct outreach to key stakeholders, and other approaches

Finalize and Release the Plan

- Incorporate feedback from the outreach process and finalize the plan
- Release the plan at a public event with the highest elected official

Alternatively, an updated appendix to the original plan with revised or new strategies can be developed. Ideally, the GHG reduction benefits of each strategy have been estimated and provided. The public should also have an opportunity to either assist with the development of or, at a minimum, provide comment on the new or revised strategies.

C. Time frame, project costs, resource needs

The time frame to update a climate action plan is similar to the timing involved in developing an initial climate action plan; however, local governments will benefit from having completed the planning process before. The level of effort involved in updating the plan depends on the scope of the proposed changes and updates to the plan. Local governments typically need about one year to update a climate action plan or similar plan. Project costs may include staff time, intern time, consultants' time, and marketing materials, Resource needs may include information-technology equipment to deliver presentations and for hosting meetings online for those who cannot attend in person, meeting space, and tools to conduct analyses. Developing an appendix with new strategies may not take as long so a slight reduction in project costs could be achieved, but the resource needs will be similar to that of a full climate action plan update.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning with assistance from the CSC task force. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments must demonstrate how they have updated a government operations and/or community climate action plan (or related plan), or developed an appendix to the original plan with updated or new strategies, within five years prior to the application date.

F. What to submit

Local governments must submit a finalized and publicly released updated climate action plan or similar plan. The update to the plan must have taken place within five years prior to the application date.

G. Linked to additional resources of best practices

- New York, NY, PlaNYC 2011 Update: http://www.nyc.gov/html/planyc2030/html/theplan/the-plan.shtml

H. Recertification requirements

Both the government operations and community climate action plans developed for original certification must have been updated within the five years prior to application for recertification.

10.3 COOPERATE WITH NEIGHBORING COMMUNITIES AND PARTNER AGENCIES

Action pathway phase: Build capacity
Eligibility timeline: Within 3 years prior to the application date
Total possible points: 3

A. Why is this action important?

Actions to mitigate and adapt to the changing climate require local, regional, state, and national cooperation and involvement. Local governments can often achieve economies of scale and greater impact by cooperating with neighboring communities to implement complementary initiatives or collaborate on one cross-cutting issue that spans jurisdictional boundaries such as flooding.

B. How to implement this action

Collaboration with neighboring jurisdictions or partner agencies can take many forms and depends on the topic to be addressed. Local governments may elect to collaborate to jointly fund a climate and energy manager or sustainability coordinator position, develop a regional building retrofit program, deliver technical assistance or green jobs training, develop a regional adaptation plan, engage the public on topics of joint interest, or implement actions from the regional sustainability plan.

While developing a climate action plan, or as part of the implementation process, local governments should identify actions that require collaboration or support from other jurisdictions, regional agencies, or state departments.

Local governments should consider the following when determining how to collaborate with neighboring jurisdictions and partner organizations:

- Define how collaboration will help all parties achieve their objectives
- Assess existing platforms for collaboration (e.g., regional sustainability planning consortia, CSC task forces)
- Determine the best suited person(s) within the partner organizations or jurisdictions to address the reason for collaboration
- Identify the process by which the initiative can be executed, funding sources for implementation, etc.
- Develop a memorandum of understanding or similar document outlining the shared objectives, approach to collaboration, and specific actions for the various participants
- Determine the best platform to celebrate the outcomes of the collaboration

C. Time frame, project costs, resource needs

The time frame for implementing this action depends on a range of factors, including the number of stakeholders involved and complexity of the action. Project costs may include staff time, funds to support an action or purchase, consulting services if the initiative requires analysis the stakeholders are unable to conduct, etc. Resource needs may include meeting space, information-technology

equipment, food and beverages for working meetings and the launch event (if one is held) for the purpose of informing and engaging the public about the initiative.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department or office with the responsibility for leading the climate efforts is most likely to be responsible for this action, although it depends on the nature of the collaboration. These activities are typically led by the chief elected official's office, the city manager's office, or the departments of environment or planning, with assistance from the CSC task force. Cross-department involvement and support are recommended.

E. How to obtain points for this action

Local governments can earn points for this action by demonstrating cooperation with neighboring communities and relevant agencies on the implementation of a joint climate mitigation or climate adaptation initiative. Local governments are eligible for points for this action if they actively participated in the development of a Cleaner, Greener Communities Regional Sustainability Plan, or have devoted significant resources to training or mentoring staff, volunteers or residents of another community in climate or energy action.

F. What to submit

Local governments must submit meeting minutes, memorandum of understanding, or a report that explains how the local government collaborated with neighboring jurisdictions or partner agencies and the outcome. The collaboration must have taken place within three years prior to the application date or be currently active. If submitting meeting minutes, local governments should submit documentation for three meetings.

G. Linked to additional resources of best practices

- Northern Westchester Energy Action Consortium: http://www.nweac.org/
- Minneapolis and St. Paul, MN, solar partnership: http://stpaul.gov/index.aspx?NID=3479
- Intermunicipal agreement for a watershed:
  http://www.hudsonwatershed.org/plans09/wappinger_watershed_agreement.pdf
  http://www.hudsonwatershed.org/plans09/sawmill.pdf

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

INNOVATION BONUS

Local governments are encouraged to innovate in the climate protection process, and can earn additional bonus points by implementing innovative projects, programs, or policies. This is achieved through implementing advanced actions not included in the rating system or using an innovative approach to implementing an action in the rating system.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Innovation Bonus			**15**	
11.1	Implement a new innovative action	Implement	10	
11.2	Implement an action using an innovative approach	Implement	5	

Please note: The recertification requirements for each action is subject to change with future versions of the CSC Certification Manual.

Note: Local governments may submit information for more than one project to earn Innovation bonus points for Action 11.1 and 11.2, as long as each project is unique and unrelated.

11.1 IMPLEMENT A NEW INNOVATIVE ACTION

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 10

A. Why is this action important?

Climate mitigation and adaptation are evolving fields with new technologies, policy solutions, and programmatic solutions being developed around the country and around the world. Local governments are encouraged to seek opportunities to implement innovative actions outside the list of actions in this rating system, and to maximize their opportunities for reducing GHG emissions and enhancing local resiliency. Implementing innovative actions is not only beneficial for the immediate community, but for local governments across the state, who are encouraged to share best practices and learn from each other.

B. How to implement this action

The implementation approach for the action depends on the type of action. The guidance provided in the manual for implementing other similar types of actions could be a useful starting point for guidance on implementing the selected action.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of action. However, an innovative action does not necessarily must have a high level of effort to implement. Many innovative solutions involve partnerships or other forms of collaboration that seek to minimize the costs and level of effort for a community to implement.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for the action depends on the type of action.

E. How to obtain points for this action

Points are earned for this action by demonstrating that this is a new and innovative action that has climate mitigation or adaptation benefits or helps to build a green economy, and is not included in the list of actions in the ten pledge elements. Local governments should specify the type of action using the action types outlined in the Introduction, (e.g. education and outreach, plan, facilities and infrastructure etc.) Points will be awarded based on the number of Climate Smart Communities program goals on which the action has a direct impact.

	Possible Points
• Reduces GHG emissions	3
• Enhances local resilience	3
• Helps build a green economy	3
• Provides additional co-benefits	1

Local governments may submit information for more than one project for this action, as long as each project is unique and unrelated. There is no limit to the number of projects a local government could submit for this action, as long as the community can demonstrate a unique innovation for each unrelated project.

F. What to submit

Local governments should submit documentation demonstrating that the action has been completed or implemented, and an explanation of how this action is new and innovative. The action must have been implemented within ten years prior to the application date to be eligible for points.

G. Links to Additional Resources or Best Practices

Best practice resources can be found throughout the Certification Manual, which may inspire new innovative solutions.

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

11.2 IMPLEMENT AN ACTION USING AN INNOVATIVE APPROACH

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 5

A. Why is this action important?

Local governments can innovate in many ways. One way to innovate is use creative approaches to implement proven strategies. An innovative approach could be a new financing strategy, partnership, policy mechanism or other new means of implementing one of the actions listed in the rating system. This action encourages local governments to tailor and implement solutions to their local needs and resources.

B. How to implement this action

The intent of this action is to encourage use of novel approaches to implementing one of the actions in the rating system. The implementation approach for the action depends on the type of action. The guidance provided in the manual for implementing other similar types of actions could be a useful starting point for guidance on implementing the selected action. However, since the focus of this action is using an innovative approach, local governments may seek to deviate from the provided guidance and alter their implementation approach.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of action. However, an innovative action or approach does not necessarily need to have a high level of effort to implement. Many innovative solutions involve partnerships or other forms of collaboration that seek to minimize the costs and level of effort for a community to implement.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for the action depends on the type of action.

E. How to obtain points for this action

Points are earned for this action by demonstrating how the community used an innovative approach to implement an action listed in the rating system. Local governments should specify the action name and number for which they are requesting innovative approach points. The points for this action are considered bonus points to be earned on top of the points the local government can earn for the action itself. Points will be awarded based on the type of action and the degree of innovation in the approach.

Local governments may submit information for several projects for this action, as long as each project is unique and unrelated. There is no limit to the number of projects a local government could submit for this action, as long as the community can demonstrate a unique innovation for each unrelated project.

F. What to submit

Local governments should submit documentation demonstrating that the action has been completed or implemented, and an explanation of how the approach to implementing this action is innovative. The action must have been implemented within ten years of the application date to be eligible for points.

G. Links to Additional Resources or Best Practices

Best practice resources can be found throughout the Certification Manual, which may inspire new innovative solutions and approaches.

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Certification Program

Certification Manual

PERFORMANCE BONUS

Earn additional points for demonstrating performance by reducing GHG emissions, increasing the use of renewables, or reducing waste volume, as compared to the baseline year used in the GHG emissions inventory.

Action #	Action Name	Action Pathway Phase	Possible Points	Priority
Performance Bonus			**230**	
12.1	Reduce GHG emissions from government-owned facilities	Implement	40	
12.2	Reduce GHG emissions from government-owned vehicles	Implement	15	
12.3	Increase use of renewables for local government operations	Implement	40	
12.4	Reduce waste volume from local government operations	Implement	15	
12.5	Reduce community-wide waste volume	Implement	20	
12.6	Reduce community-wide GHG emissions from transportation	Implement	50	
12.7	Reduce community-wide GHG emissions from buildings	Implement	50	

Please note: The recertification requirements for each action are subject to change in future versions of the CSC Certification Manual.

12.1 REDUCE GHG EMISSIONS FROM GOVERNMENT-OWNED FACILITIES

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 40

A. Why is this action important?

Government-owned facilities are typically one of the largest sources of emissions in a local government GHG emissions inventory. Local governments can earn additional performance bonus points for demonstrating a reduction in GHG emissions from the baseline year in government-owned facilities.

B. How to implement this action

Pledge Element 3 provides a list of actions for reducing GHG emissions from government-owned buildings.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 3.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for managing government-owned buildings, typically the department of public works or facilities, will have responsibility for implementing this action. The department or staff member with responsibility for the GHG emissions inventory would be responsible for calculating the reduction in GHG emissions.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in GHG emissions from the baseline year in government-owned facilities.

	Possible Points
• Reduce GHG emissions from government-owned facilities by 5%	5
• Reduce GHG emissions from government-owned facilities by 10%	10
• Reduce GHG emissions from government-owned facilities by 15%	15
• Reduce GHG emissions from government-owned facilities by 20%	20
• Reduce GHG emissions from government-owned facilities by 25%	25
• Reduce GHG emissions from government-owned facilities by 30%	30
• Reduce GHG emissions from government-owned facilities by 35%	35
• Reduce GHG emissions from government-owned facilities by 40% or more	40

F. What to submit

Local governments must submit documentation demonstrating a reduction in GHG emissions as compared to the baseline year, for government-owned buildings. Methods to calculate GHG emissions reductions must be consistent with relevant provisions of the Local Government Operations Protocol.

G. Links to Additional Resources or Best Practices

- Local Government Operations Protocol: http://www.icleiusa.org/tools/ghg-protocol/local-government-operations-protocol-1/local-government-operations-protocol

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.2 REDUCE GHG EMISSIONS FROM GOVERNMENT-OWNED VEHICLES

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 15

A. Why is this action important?

Government-owned vehicles are often one of the larger sources of emissions in a local government GHG emissions inventory. Local governments can earn additional performance bonus points for demonstrating a reduction in GHG emissions from the baseline year from government-owned vehicles.

B. How to implement this action

Pledge Element 3 provides a list of actions for reducing GHG emissions from government-owned vehicles.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 3.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for managing the vehicle fleet, typically the department of public works or transportation, will have responsibility for implementing this action. The department or staff member with responsibility for the GHG emissions inventory would be responsible for calculating the reduction in GHG emissions.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in GHG emissions from the baseline year from government-owned vehicles.

	Possible Points
• Reduce GHG emissions from government-owned vehicles by 5%	3
• Reduce GHG emissions from government-owned vehicles by 10%	5
• Reduce GHG emissions from government-owned vehicles by 15%	7
• Reduce GHG emissions from government-owned vehicles by 20%	10
• Reduce GHG emissions from government-owned vehicles by 25%	12
• Reduce GHG emissions from government-owned vehicles by 30% or more	15

F. What to submit

Local governments must submit documentation demonstrating a reduction in GHG emissions as compared to the baseline year, for government-owned vehicles. Methods to calculate GHG emissions reductions must be consistent with relevant provisions of the Local Government Operations Protocol.

G. Links to Additional Resources or Best Practices

- Local Government Operations Protocol: http://www.icleiusa.org/tools/ghg-protocol/local-government-operations-protocol-1/local-government-operations-protocol

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.3 INCREASE USE OF RENEWABLES FOR LOCAL GOVERNMENT OPERATIONS

Action pathway phase: Implement
Eligibility timeline: Currently active
Total possible points: 40

A. Why is this action important?

Using renewable energy for government operations not only contributes to reducing energy use and GHG emissions from one of the larger sources of emissions from government operations, but also provides the local government with the opportunity to lead by example.

B. How to implement this action

Pledge Element 4 provides a list of actions for increasing the use of renewables for government operations.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 4.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for managing building energy use, typically the department of facilities, will have responsibility for implementing this action.

E. How to obtain points for this action

Points are earned for this action by demonstrating the percentage of the total current energy use in buildings and facilities from renewables according to the table below. Renewable energy must come from acceptable renewable energy sources or resources, as outlined in Pledge Element 4.

	Possible Points
• 5% of government energy use from renewables	5
• 10% of government energy use from renewables	8
• 20% of government energy use from renewables	12
• 30% of government energy use from renewables	16
• 40% of government energy use from renewables	20
• 50% of government energy use from renewables	24

- 60% of government energy use from renewables 28
- 70% of government energy use from renewables 32
- 80% of government energy use from renewables 36
- Greater than 90% of government energy use from renewables 40

F. What to submit

Local governments must submit documentation demonstrating the percentage of total energy use in buildings and facilities from renewables.

G. Links to Additional Resources or Best Practices

- Local Government Operations Protocol: http://www.icleiusa.org/tools/ghg-protocol/local-government-operations-protocol-1/local-government-operations-protocol

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.4 REDUCE WASTE VOLUME FROM LOCAL GOVERNMENT OPERATIONS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 15

A. Why is this action important?

Reducing waste and increasing recycling can make a significant contribution to reducing GHG emissions from local government operations. Local governments can earn additional performance bonus points for demonstrating a reduction in waste volume from the baseline year for local government operations.

B. How to implement this action

Pledge Element 3 provides a list of actions for reducing waste from local government operations.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 3.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for managing waste, typically the department of sanitation or public works, will have responsibility for implementing this action.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in waste volume from the baseline year for local government operations.

	Possible Points
• Reduce waste from government operations by 5%	2
• Reduce waste from government operations by 10%	4
• Reduce waste from government operations by 20%	6
• Reduce waste from government operations by 30%	9
• Reduce waste from government operations by 40%	12
• Reduce waste from government operations by 50% or more	15

F. What to submit

Local governments must submit documentation demonstrating a reduction in total waste volume from government operations as compared to the baseline year.

G. Links to Additional Resources or Best Practices

- DEC, Waste Reduction: http://www.dec.ny.gov/chemical/8502.html
- DEC, Municipal Solid Waste Composition Analysis Tool: http://www.dec.ny.gov/chemical/65541.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.5 REDUCE COMMUNITY-WIDE WASTE VOLUME

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 20

A. Why is this action important?

Reducing waste and increasing recycling can make a significant contribution to reducing GHG emissions community-wide. Local governments can earn additional performance bonus points for demonstrating a reduction in community-wide waste volume from the baseline year for waste.

B. How to implement this action

Pledge Element 5 provides a list of actions for reducing community-wide waste.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 5.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The department with responsibility for managing waste, typically the department of sanitation or public works, will have responsibility for implementing this action.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in waste volume from the baseline year.

	Possible Points
• Reduce community-wide waste volume by 5%	5
• Reduce community-wide waste volume by 10%	8
• Reduce community-wide waste volume by 20%	11
• Reduce community-wide waste volume by 30%	14
• Reduce community-wide waste volume by 40%	17
• Reduce community-wide waste volume by 50% or more	20

F. What to submit

Local governments must submit documentation demonstrating a reduction in total community-wide waste volume as compared to the baseline year.

G. Links to Additional Resources or Best Practices

- DEC, Waste Reduction: http://www.dec.ny.gov/chemical/8502.html
- DEC, MSW Composition Analysis Tool: http://www.dec.ny.gov/chemical/65541.html

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.6 REDUCE COMMUNITY-WIDE GHG EMISSIONS FROM TRANSPORTATION

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 50

A. Why is this action important?

Transportation typically accounts for a large portion of community-wide GHG emissions, and any comprehensive GHG emissions reductions plan will involve a suite of actions to reduce emissions from transportation. Local governments can earn additional performance bonus points for demonstrating a reduction from the baseline year in community-wide GHG emissions from transportation.

B. How to implement this action

Pledge Element 6 provides a list of actions for reducing community-wide GHG emissions from transportation.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 6.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. The departments with the responsibility for land-use planning, transportation, and public transit will have the responsibility for implementing this action. The department or staff member with responsibility for the GHG emissions inventory would be responsible for calculating the reduction in GHG emissions.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in community-wide GHG emissions from the baseline year for transportation.

	Possible Points
• Reduce community-wide GHG emissions from transportation by 5%	5
• Reduce community-wide GHG emissions from transportation by 10%	10
• Reduce community-wide GHG emissions from transportation by 15%	15
• Reduce community-wide GHG emissions from transportation by 20%	20
• Reduce community-wide GHG emissions from transportation by 25%	25
• Reduce community-wide GHG emissions from transportation by 30%	30
• Reduce community-wide GHG emissions from transportation by 35%	35
• Reduce community-wide GHG emissions from transportation by 40%	40
• Reduce community-wide GHG emissions from transportation by 45%	45
• Reduce community-wide GHG emissions from transportation by 50% or more	50

F. What to submit

Local governments must submit documentation demonstrating a reduction in GHG emissions as compared to the baseline year, for community-wide transportation emissions. Methods to calculate GHG emissions reductions must be consistent with relevant provisions of the U.S. Community Protocol. Local governments that are unable to demonstrate reductions in GHG emissions but have demonstrable data on changes in mode share can submit that information for consideration for bonus points.

G. Links to Additional Resources or Best Practices

- U.S. Community Protocol for Accounting and Reporting of GHG Emissions: http://www.icleiusa.org/tools/ghg-protocol/community-protocol

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

12.7 REDUCE COMMUNITY-WIDE GHG EMISSIONS FROM BUILDINGS

Action pathway phase: Implement
Eligibility timeline: Within 10 years prior to the application date
Total possible points: 50

A. Why is this action important?

Energy use from buildings is typically the largest source of GHG emissions in a community's inventory. Implementing a suite of strategies to reduce energy use and GHG emissions from residential, commercial, institutional, and industrial buildings is an essential part of any long-term GHG emissions reduction plan. Local governments can earn additional performance bonus points for demonstrating a reduction from the baseline year in community-wide GHG emissions from buildings.

B. How to implement this action

Pledge Element 6 provides a list of actions for reducing community-wide GHG emissions from buildings.

C. Time frame, project costs, and resource needs

The time frame, costs, and resource needs depend on the type of actions implemented, as outlined in Pledge Element 6.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. Several departments could be involved in this effort, depending on the type of strategies implemented including incentives, green building codes, renewable energy ordinances, or other types of strategies. The department or staff member with responsibility for the GHG emissions inventory would be responsible for calculating the reduction in GHG emissions.

E. How to obtain points for this action

Points are earned for this action by demonstrating a reduction in community-wide GHG emissions from the baseline year for buildings.

	Possible Points
• Reduce community-wide GHG emissions from buildings by 5%	5
• Reduce community-wide GHG emissions from buildings by 10%	10
• Reduce community-wide GHG emissions from buildings by 15%	15
• Reduce community-wide GHG emissions from buildings by 20%	20
• Reduce community-wide GHG emissions from buildings by 25%	25
• Reduce community-wide GHG emissions from buildings by 30%	30
• Reduce community-wide GHG emissions from buildings by 35%	35
• Reduce community-wide GHG emissions from buildings by 40%	40
• Reduce community-wide GHG emissions from buildings by 45%	45
• Reduce community-wide GHG emissions from buildings by 50% or more	50

F. What to submit

Local governments must submit documentation demonstrating a reduction in GHG emissions for community-wide buildings, as compared to the baseline year. Methods to calculate GHG emissions reductions must be consistent with relevant provisions of the U.S. Community Protocol.

G. Links to Additional Resources or Best Practices

- U.S. Community Protocol for Accounting and Reporting of GHG Emissions: http://www.icleiusa.org/tools/ghg-protocol/community-protocol

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.

Climate Smart Communities Action Checklist Version 1.0

Note: An Excel spreadsheet version of this checklist is available upon request to the Office of Climate Change.

Action #	Action Name	Action Pathway Phase	Possible Points	Tiered Points	Priority
Pledge Element 1: Pledge to be Climate Smart Community			**31**		
1.1	Pass a resolution adopting the CSC Pledge	Commit	4		√
1.2	Create a community Climate Smart Community task force focused on climate mitigation and adaptation	Build Capacity	8	√	√
1.3	Appoint a Climate Smart Community coordinator	Build Capacity	8		√
1.4	Create an internal green team focused on climate mitigation and adaptation	Build Capacity	8	√	√
1.5	Join a national or regional climate campaign or program	Build Capacity	3		
Pledge Element 2: Set goals, inventory emissions, plan for climate action			**40**		
Establish a baseline			**16**		
2.1	Develop a government operations GHG emissions inventory	Assess, Plan, Govern	8		√
2.2	Develop a community GHG emissions inventory	Assess, Plan, Govern	8		√
Set goals			**8**		
2.3	Establish a government operations emissions reduction target	Assess, Plan, Govern	4		√
2.4	Establish a community emissions reduction target	Assess, Plan, Govern	4		√
Plan for climate action			**16**		
2.5	Develop a government operations climate action plan	Assess, Plan, Govern	8	√	√
2.6	Develop a community climate action plan	Assess, Plan, Govern	8	√	√
Pledge Element 3: Decrease community energy use			**138**		
Building and stationary equipment			**55**		
3.1	Conduct energy audits of local government buildings	Assess, Plan, Govern	8	√	√
3.2	Upgrade interior lighting	Implement	5	√	
3.3	Upgrade HVAC equipment	Implement	5	√	
3.4	Install water-efficient fixtures	Implement	4	√	
3.5	Install a building energy management system (EMS)	Implement	5	√	

3.6	Upgrade building envelope	Implement	7	√	
3.7	Adopt a green building standard for local government buildings and facilities	Assess, Plan, Govern	4	√	
3.8	Build a new green building	Implement	10	√	
3.9	Upgrade water or wastewater treatment facilities and infrastructure	Implement	7	√	
Fleet and vehicle fuel			**18**		
3.10	Adopt a vehicle fleet efficiency policy	Assess, Plan, Govern	3		
3.11	Right-size the local government fleet	Implement	3	√	
3.12	Replace traditional vehicles with advanced vehicles	Implement	5	√	
3.13	Adopt an anti-idling policy for government vehicles	Assess, Plan, Govern	3		
3.14	Implement a car-sharing program for local government staff	Implement	4	√	
Outdoor lighting			**17**		
3.15	Convert streetlights to LED	Implement	5	√	
3.16	Convert traffic signals to LED	Implement	4	√	
3.17	Reduce number of outdoor lighting fixtures	Implement	4	√	
3.18	Upgrade outdoor lighting (other than streetlights and traffic signals) to more efficient and/or solar technology	Implement	4	√	
Government solid waste			**13**		
3.19	Adopt a waste management strategy for government hosted and permitted events	Assess, Plan, Govern	2	√	
3.20	Provide recycling bins next to all trash receptacles in local government buildings	Implement	3	√	
3.21	Provide organic waste collection and composting in local government buildings	Implement	3	√	
3.22	Provide e-waste collection in local government buildings	Implement	3	√	
3.23	Conduct a local government waste audit and track diversion rate over time	Assess, Plan, Govern	2		
Financial and policy mechanisms			**18**		
3.24	Adopt an environmentally preferable purchasing policy	Assess, Plan, Govern	4	√	
3.25	Establish a financing mechanism for energy efficiency and renewable energy projects in government owned buildings	Implement	5		
3.26	Incorporate energy efficiency and waste handling provisions in standard specifications and government contracts	Assess, Plan, Govern	3	√	

3.27	Utilize a green or sustainability rating system for infrastructure improvement projects	Implement	6	√	
Employee and staff behavior			**8**		
3.28	Subsidize and incentivize employee alternative commuting	Implement	3	√	
3.29	Engage employees through a green pledge or competition	Implement	2		
3.30	Incorporate green principles, commitments or requirements into staff training	Implement	3		
Energy and GHG management policies and systems			**9**		
3.31	Implement an energy or GHG management system	Implement	5		
3.32	Adopt an energy benchmarking requirement for government-owned buildings	Implement	4	√	
Pledge Element 4: Increase community use of renewable energy			**62**		
Policies, planning, and financing			**20**		
4.1	Adopt a green power purchase policy to ensure increasing local government energy supplies come from renewables	Assess, Plan, Govern	4	√	
4.2	Require that new construction of local government buildings is “PV-Ready”	Assess, Plan, Govern	4		
4.3	Conduct feasibility studies for renewable energy installations	Assess, Plan, Govern	5		
4.4	Purchase renewable energy credits (RECs)	Implement	7	√	
Increase use of renewables			**42**		
4.5	Install a geothermal heat pump or other geothermal technology at a new or existing public facility	Implement	9		
4.6	Install solar hot water and/or solar photovoltaic technology on public property	Implement	9		
4.7	Serve as a host site for a renewable energy installation and enter into a long-term service contract or power purchase agreement (PPA)	Implement	9		
4.8	Install a wind system on public property	Implement	9		
4.9	Install a wood pellet heating system on public property	Implement	6		
Pledge Element 5: Realize benefits of recycling and other climate-smart solid waste management practices			**49**		
Waste diversion policies and plans			**6**		
5.1	Adopt a zero waste initiative policy	Assess, Plan, Govern	3		

5.2	Discourage the use of disposable bags	Assess, Plan, Govern	3	√	
Implement waste diversion strategies			**43**		
5.3	Participate in the EPA WasteWise program	Implement	2	√	
5.4	Implement a pay-as-you-throw or similar unit pricing program	Implement	6	√	
5.5	Adopt a construction and demolition waste reduction program or policy	Implement	3	√	
5.6	Set up and manage a resource recovery center to encourage reuse of gently used or new materials that have been discarded	Implement	3		
5.7	Offer recycling to residents	Implement	8	√	
5.8	Offer recycling to commercial entities (or require that they recycle)	Implement	8	√	
5.9	Provide recycling bins in public places and events	Implement	3	√	
5.10	Provide compost bins to residents (for sale or free)	Implement	2		
5.11	Create an organics or yard waste collection program	Implement	6		
5.12	Host household hazardous waste collection days	Implement	2		
5.13	Create an educational campaign to encourage recycling, composting and waste reduction	Implement	2		
Pledge Element 6: Reduce greenhouse gas emissions through use of climate-smart land-use tools		**109**			
Planning			**9**		
6.1	Develop and adopt a comprehensive plan with sustainability elements	Assess, Plan, Govern	9	√	
Land use and building codes			**31**		
6.2	Incorporate smart growth principles into land-use policies and regulations	Assess, Plan, Govern	8	√	
6.3	Adopt a renewable energy ordinance	Assess, Plan, Govern	4	√	
6.4	Establish green building codes	Assess, Plan, Govern	6		
6.5	Create resource-efficient site design guidelines	Assess, Plan, Govern	4		
6.6	Incentivize renewable energy and energy efficiency projects	Implement	5		
6.7	Adopt land-use policies that support or incentivize farmers' markets, community gardens and urban and rural agriculture	Assess, Plan, Govern	4	√	
Resource-efficient transportation			**52**		
6.8	Adopt green parking lot standards	Assess, Plan, Govern	4		

6.9	Adopt a complete streets policy	Assess, Plan, Govern	4		
6.10	Implement strategies that support bicycling and walking	Implement	10	√	
6.11	Install electric-vehicle infrastructure	Implement	8		
6.12	Implement strategies that increase public transit ridership and alternative transport modes	Implement	10	√	
6.13	Implement a Safe Routes to School program	Implement	3		
6.14	Implement traffic calming measures	Implement	5	√	
6.15	Adopt and enforce an anti-idling ordinance	Assess, Plan, Govern	3		
6.16	Implement transportation technology solutions	Implement	5	√	
Natural Resource and Open Space Preservation			**17**		
6.17	Develop a natural resource inventory	Assess, Plan, Govern	5		
6.18	Develop a local forestry or tree planting project or program	Implement	6	√	
6.19	Preserve natural areas through zoning or other regulations	Assess, Plan, Govern	6		
Pledge Element 7: Enhance community resilience and prepare for the effects of climate change		**119**			
Establishing a baseline			**11**		
7.1	Conduct a vulnerability assessment	Assess, Plan, Govern	11	√	√
Goals			**2**		
7.2	Develop a climate resilience vision and associated goals	Assess, Plan, Govern	2		
Planning and policy			**15**		
7.3	Review existing community plans and projects to identify climate adaptation strategies and policies or projects that may decrease vulnerability	Assess, Plan, Govern	4	√	√
7.4	Develop climate adaptation strategies	Assess, Plan, Govern	5	√	
7.5	Incorporate climate resiliency vision, goals, and strategies into local plans and projects	Assess, Plan, Govern	3		
7.6	Update the multi-hazard mitigation plan to address changing conditions and identify specific strategies to reduce vulnerability to natural hazards	Assess, Plan, Govern	3		
Strategies to address extreme heat			**10**		

7.7	Develop and implement a heat emergency plan	Assess, Plan, Govern	4		
7.8	Require shade structures and features in public spaces	Assess, Plan, Govern	4		
7.9	Open new or expand existing cooling centers	Implement	2		
Strategies to address flooding			**67**		
7.10	Create or update a watershed assessment to identify flooding and water quality priorities	Assess, Plan, Govern	4		
7.11	Adopt a floodplain management and protection ordinance to reduce vulnerability to flooding and erosion	Assess, Plan, Govern	3		
7.12	Conserve, revegetate and reconnect floodplains and buffers in riparian areas	Implement	7		
7.13	Conserve natural areas for species migration and ecosystem resilience	Implement	7	√	
7.14	Facilitate a strategic relocation of uses that are not water dependent from flood prone areas	Implement	5	√	
7.15	Promote community flood prevention strategies through the National Flood Insurance Program Community Rating System	Assess, Plan, Govern	3	√	
7.16	Use green infrastructure to manage stormwater in developed areas	Implement	7	√	
7.17	Conserve wetlands and forests to manage stormwater, recharge groundwater and mitigate flooding	Implement	8	√	
7.18	Use natural, nature-based or ecologically enhanced shoreline protection	Implement	8	√	
7.19	Extend areas in which the two foot freeboard requirement applies	Assess, Plan, Govern	3		
7.20	Require consideration of sea-level rise in planning coastal development	Assess, Plan, Govern	3		
7.21	Right-size bridges and culverts, and remove unnecessary and hazardous dams	Implement	5	√	
7.22	Develop or enhance early warning systems and community evacuation plans	Implement	4		
Strategies to address drought surge			**14**		
7.23	Implement a water conservation and reuse program	Implement	6		
7.24	Encourage xeriscaping	Assess, Plan, Govern	2	√	
7.25	Implement a source water protection program	Implement	6	√	
Pledge Element 8: Support a development of a green innovation economy			**56**		
Training and Education			**5**		

8.1	Create a green jobs training program	Implement	3		
8.2	Hold green vendor fairs	Implement	2		
Planning and Leadership			**9**		
8.3	Include green industries in economic development plans	Assess, Plan, Govern	4		
8.4	Incorporate sustainability requirements in local government funded programs or projects	Implement	5		
Local Business Engagement and Support			**9**		
8.5	Adopt a green procurement policy that emphasizes local sourcing	Implement	4	√	
8.6	Create and promote local farmers' markets	Implement	3		
8.7	Create a “buy local/buy green” campaign	Implement	2		
Siting and Incentivizing Green Business/Industry			**21**		
8.8	Redevelop a brownfield site	Implement	10	√	
8.9	Establish incentives for green industry or businesses to locate in community	Implement	4		
8.10	Support alternative transportation fuel supply infrastructure	Implement	7	√	
Creating Demand for Green Jobs			**12**		
8.11	Adopt energy benchmarking requirements for privately owned buildings	Implement	5	√	
8.12	Establish a residential energy efficiency financing program	Implement	7	√	
Pledge Element 9: Inform and inspire the public			**18**		
9.1	Create a climate change education, outreach, and engagement program, focusing on mitigation and adaptation	Build Capacity	4	√	
9.2	Create and support an energy reduction campaign or challenge	Implement	5	√	
9.3	Host climate related educational seminars, workshops, conferences, or fairs	Implement	3		
9.4	Maintain a website on local climate protection efforts	Implement	3		
9.5	Use social media to inform the community about the progress of local government's efforts	Monitor and report	3		
Pledge Element 10: Commit to an evolving process of climate action			**11**		
10.1	Report on progress annually	Monitor and report	4		
10.2	Update strategies and plan(s)	Assess, Plan, Govern	4		

10.3	Cooperate with neighboring communities and partner agencies	Build Capacity	3		
Innovation			**15**		
11.1	Implement a new innovative action	Implement	10	√	
11.2	Implement an action using an innovative approach	Implement	5		
Performance Bonus			**230**		
12.1	Reduce GHG emissions from government owned facilities	Implement	40	√	
12.2	Reduce GHG emissions from government owned vehicles	Implement	15	√	
12.3	Increase use of renewables for local government operations	Implement	40	√	
12.4	Reduce waste volume from local government operations	Implement	15	√	
12.5	Reduce community-wide waste volume	Implement	20	√	
12.6	Reduce community-wide GHG emissions from transportation	Implement	50	√	
12.7	Reduce community-wide GHG emissions from buildings	Implement	50	√	
TOTAL			**878**		