NEW YORK STATE OF OPPORTUNITY. | Climate Smart Communities

PE2 Action: Government Operations GHG Inventory

16 Points | BRONZE PRIORITY | SILVER PRIORITY

A. Why is this action important?

A greenhouse gas (GHG) emissions inventory is one of the first and most important steps in the local climate action process. A local government operations GHG inventory is an accounting, analysis, and report of the GHG emissions resulting from the day-to-day operations of a village, town, city, or county. It summarizes the GHG emissions from the consumption of energy and materials in government buildings, from wastewater and water treatment facilities, from municipal vehicle fleets, from government-owned outdoor lighting, and from other sources. All Climate Smart Communities should prioritize GHG inventories as a foundational step toward effective action. GHG inventories provide the data needed to set realistic goals and track progress toward reducing operating costs, energy use, and emissions.

GHG inventory reports identify the largest energy users and sources of GHG emissions (e.g., by building, sector, or department). As a result, GHG inventories help local governments select actions that offer a good return on investment and should be highlighted in subsequent climate action planning. Over time, as a local government builds its capacity to conduct GHG inventories on a regular basis, the process helps to increase the ability of the local government to operate efficiently and use taxpayer resources effectively.

B. How to implement this action

For detailed guidance on implementation, download the Climate Smart Communities (CSC) guide Developing a Local Government Operations Greenhouse Gas Inventory. The information below provides an overview of the process.

At minimum, the inventory must include the Scope 1 and Scope 2 GHG emissions from government operations for the specific village, town, city, or county that is applying for CSC certification. Examples of the emissions categorized as Scope 1 and Scope 2 are described below.

- Direct GHG emissions (known as Scope 1) - for example, from government-owned vehicles, onsite fuel combustion (e.g., natural gas, propane, or fuel oil), wastewater treatment facilities, landfills, refrigerant leakage
- Indirect GHG emissions (known as Scope 2) – for example, from purchased electricity

Reporting on Scope 3 emissions is optional for this action, though highly encouraged. Scope 3 emissions are the other indirect GHG emissions not included in Scope 2. These include emissions resulting from the extraction and production of purchased materials and fuels, transportation in vehicles not owned or controlled by the reporting entity, outsourced activities, and waste disposal. A common source of Scope 3 emissions that is often included in government operations inventories is employee commuting. (Note that some voluntary GHG reporting programs require reporting of emissions from specified Scope 3 sources.)

Below is a summary of the steps involved in creating a local government operations GHG inventory:

1. Put together a small team who will manage the GHG inventory process and define each member's responsibilities. Identify key contacts who will provide support and data throughout the project. The team should focus not only on producing the GHG inventory report, but also on creating a process and data collection templates that will make producing the inventory easier next time.
2. Review options for GHG inventory tools, and select a tool that is appropriate for local goals and resources. (Free Excel-based GHG tools are available; contact climatesmart@dec.ny.gov for details.) Confirm that the

GHG tool is compliant with the Local Government Operations Protocol (LGOP), a standardized set of guidelines for quantifying and reporting the GHG emissions associated with local government operations.
3. Prepare for the process by determining what will be included in the GHG inventory. Preparation involves selecting a baseline year, assessing which emissions the local government is responsible for, and deciding what government sectors, facilities, and emission sources will be included. The CSC program recommends including only those emission sources over which the local government has operational control. Keep the inventory practical and cost-effective by focusing on the largest sources of emissions; an inventory that covers about 95% of GHG emissions is acceptable and complies with the LGOP. In general, facility energy use, fleet fuels, and streetlights tend to account for about 90% of local government GHG emissions, for those communities that do not operate a landfill or wastewater treatment plant.
4. Gather and organize the data. Request data on energy use and other sources of emissions from relevant local government departments and agencies. Review the data for completeness and accuracy.
5. Enter the data and calculate GHG emissions using the selected inventory tool. Review the calculations to confirm accuracy. Identify key findings.
6. Develop a GHG emissions forecast, where feasible, to estimate how emissions are likely to grow in the near future. Some GHG tools have the capacity to create a simple business-as-usual projection, while other, more sophisticated tools can create a range of forecasts.
7. Develop the GHG inventory report, and share it with the community.
8. Repeat the process every five years, at minimum.

C. Time frame, project costs, and resource needs

Developing a GHG inventory is a data-intensive task that involves costs related to staff time and, where applicable, time for consultants and/or interns. Project coordinators should review the available options for GHG inventory tools and select a tool that is appropriate for local goals and resources. Free GHG tools are available. Contact climatesmart@dec.ny.gov for details.

The total amount of time to produce the inventory depends on several factors, including the size and complexity of the local government, availability and quality of data, amount of resources dedicated to the effort, and promptness of contacts in providing data. The process can take a few months if the data are well organized and readily available. The first inventory process could take as much as a year. When procedures are put in place to enable regular updates of the GHG inventory, the time required will be reduced significantly as data collection improves and staff become 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. Planning departments or offices that lead climate and/or sustainability efforts are often responsible for managing the creation of GHG inventories. Cross-department involvement is often required to gather all the needed data. Local governments are encouraged to host a kick-off meeting at the beginning of the process and a meeting at the end to discuss the results with local government staff. If the local government chooses to organize a community event to share the report, a public relations officer or communications staff could be involved as well.

E. How to obtain points for this action

A local government operations GHG inventory report that is consistent with the requirements described here is eligible for a total of 16 points.

F. What to submit

Submit a copy of a local government operations GHG inventory report that was completed within five years prior to the application date. As described above, at minimum, the inventory must include the Scope 1 and Scope 2 GHG emissions from government operations for the specific village, town, city, or county that is applying for CSC certification.

The inventory results can be presented in a report that is a standalone document, or they can be integrated into another

report or plan. Provide evidence that the report was released to the public; for example, it could be posted on a government website or made available for review at a local library.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- CSC guide Developing a Local Government Operations Greenhouse Gas Inventory
- US EPA Local GHG Inventory Tools: Download free tools and sign up for updates.
- ICLEI - Local Governments for Sustainability USA, Inc.: ICLEI has a comprehensive GHG tool called ClearPath for conducting GHG inventories, forecasts, and monitoring at the community or government operations scale. Membership in ICLEI involves an annual fee based on municipal size and includes access to ClearPath.
- DEC CSC Pledge Element 2 – Local Greenhouse Gas Inventories

H. Recertification requirements

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

NEW YORK STATE OF OPPORTUNITY. | Climate Smart Communities

PE2 Action: Community GHG Inventory

16 Points | BRONZE PRIORITY | SILVER PRIORITY

A. Why is this action important?

Understanding the sources of greenhouse gas (GHG) emissions and establishing a GHG baseline are critical first steps in the local climate action process. A community GHG inventory is an accounting, analysis, and report of the GHG emissions resulting from transportation fuels, waste, energy usage in buildings, and other sources within a given geographic boundary.

Government operations typically account for less than three percent of a community's emissions. It is therefore important to understand how the industries, businesses, schools, homes, and vehicles in the entire community are contributing to climate change. Community GHG inventories provide the data needed to set realistic goals and track progress toward reducing costs, energy use, and emissions. By identifying the largest sources of emissions in the community, GHG inventories help local governments focus policies and incentives on the most important sectors. All Climate Smart Communities should prioritize completing a community GHG inventory as a foundational step that enables the community to establish a baseline against which to measure progress over time.

B. How to implement this action

Community inventories should include all GHG emissions that occur physically within the boundary and, to the extent possible, those that occur indirectly regardless of location because of community activity or consumption. Therefore, GHG sources are labeled as one of the following:

- Direct emissions that occur physically within a boundary, such as those emitted by burning natural gas or fuel oil in homes, schools, and businesses (known as Scope 1)
- Indirect emissions from utility energy generation plants based on the amount of electricity (or other utilities such as hot water or steam) consumed within the boundary, regardless of where the plants are located (known as Scope 2)
- Other indirect, upstream, or lifecycle emissions attributed to community activity regardless of where they occur (known as Scope 3)

A municipality may not earn Climate Smart Communities (CSC) certification points for an inventory that covers only the county or region within which the municipality is located; the municipality must submit an inventory that corresponds with its municipal boundaries.

In general, the CSC program recommends that inventories adhere to ICLEI's US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (US Community Protocol). This national standard advises communities to include a variety of direct and indirect sources they can control or influence with local and regional policy. While the US Community Protocol provides a methodology tailored to US communities, those communities interested in reporting to international registries such as carbonn Climate Registry should also consult the Global Protocol for Community-Scale Emissions.

Fortunately, there is also guidance that is specific to New York State. The New York Community and Regional Greenhouse Gas Inventory Guidance is a collection of methods and data sources applicable to New York State, created by the New York State GHG Working Group. The guide can be considered a compendium guide to the US Community Protocol, but it can also be used as a standalone guide. It does not cover all sources discussed in the US Community Protocol but includes enough information to complete a basic GHG inventory suitable for most regions or communities. In some

important cases, the New York State GHG Working Group recommendations differ from the US Community Protocol. For example, the US Community Protocol recommends that communities use electricity (Scope 2) emission factors developed by the US EPA Emissions & Generation Resource Integrated Database (eGRID). The CSC program, however, prefers that communities in New York State follow the guidance that NYSERDA currently has in place regarding Scope 2 emissions factors. NYSERDA updates these factors annually. Contact climatechange@dec.ny.gov for details.

Community inventories that comply with the New York Community and Regional Greenhouse Gas Inventory Guidance, US Community Protocol, or the Global Protocol for Community-Scale Emissions are eligible for points under the CSC Certification Program.

C. Time frame, project costs, and resource needs

Conducting a community GHG emissions inventory can take between three to six months, depending on the availability and quality of the data. Community GHG emissions inventories usually take less time than local government operations inventories because community inventories rely heavily on estimates of community-wide energy use and other activities, rather than on the large quantity of direct data that is required for local government operations inventories. The cost of producing a community inventory may include paying a consultant or an intern, or possibly covering the cost of staff time. In addition, some local governments choose to pay for the use of a community GHG inventory tool. However, free tools for community inventories are available. Contact climatechange@dec.ny.gov for details.

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. Planning departments or offices that lead climate and/or sustainability efforts are often responsible for managing the creation of GHG inventories. If local leaders choose to host a community event to share the findings, a public relations officer or communications staff could be involved as well.

E. How to obtain points for this action

A community GHG inventory report that is consistent with the requirements described here is eligible for a total of 16 points.

F. What to submit

Submit a copy of a community GHG inventory report that was completed within five years prior to the application date. The inventory report can be a standalone document, or it can be integrated into another report or plan. Provide evidence that the report was released to the public; for example, it could be posted on a government website or made available for review at a local library.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- US EPA Local GHG Inventory Tools: Download free tools and sign up for updates.
- ICLEI - Local Governments for Sustainability USA, Inc.: ICLEI has a comprehensive GHG tool called ClearPath for conducting GHG inventories, forecasts, monitoring, and climate action planning at the community or government operations scale. Membership in ICLEI involves an annual fee based on municipal size and includes access to ClearPath.
- DEC CSC Pledge Element 2 – Local Greenhouse Gas Inventories

H. Recertification requirements

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

NEW YORK STATE OF OPPORTUNITY. | Climate Smart Communities

PE2 Action: Government Operations Climate Action Plan

12 Points | 16 Points | BRONZE PRIORITY | SILVER PRIORITY

A. Why is this action important?

A climate action plan (CAP) is a strategy document that sets goals and outlines a set of initiatives that reduce greenhouse gas (GHG) emissions. Using a GHG emissions inventory as the foundation, a CAP defines GHG reduction targets and provides a framework for achieving those targets. The CAP identifies priority actions and facilitates coordination across government departments. In addition, the CAP supports effective action over time by establishing methods for assessing progress and adjusting the local strategy if GHG targets are surpassed or not fulfilled. By developing such a plan for their own operations, local governments take leadership roles and provide their communities with examples that help to inspire community-wide action.

Local governments are encouraged to incorporate climate adaptation strategies into their CAP. However, under the Climate Smart Communities (CSC) Certification program, points for climate adaptation planning are awarded under Pledge Element 7: Enhance community resilience to climate change.

B. How to implement this action

For detailed guidance on implementation, download the CSC Climate Action Planning Guide. The information below provides an overview of the process and key components. The CAP must include the results of the local government operations GHG inventory. See *PE2 Action: Government Operations GHG Inventory* for details on how to complete this prerequisite. Emissions forecasts (often included in the GHG inventory process) are also useful during climate action planning because such forecasts anticipate shifts in emissions caused by population change, technological developments, or economic impacts.

The CAP must include at least one GHG reduction target. Some local governments find it valuable to set more than one target; they often establish short- and long-term targets. The short-term targets help to ensure that action is taken in the near term, whereas long-term targets can set the stage for major planning initiatives and investments designed to dramatically reduce energy use and emissions. New York State's targets for reducing GHG emissions are 40 percent by 2030 and 80 percent by 2050 (below 1990 levels). Local governments are encouraged to align their targets with state goals.

The basic steps to create a local CAP are as follows:

1. Determine leadership and CAP framework.
2. Develop communication and engagement strategy. (For this CSC action, applicants are not required to include public outreach, but doing so will make the applicant eligible for an additional 4 points.)
3. Complete and analyze baseline assessments.
4. Identify goals and GHG reduction targets.
5. Identify existing and potential initiatives.
6. Prioritize initiatives.
7. Create a plan for implementing the chosen initiatives.
8. Establish metrics.
9. Write the CAP, adopt it, and make it publicly available.

C. Time frame, project costs, and resource needs

Crafting a CAP for government operations takes about six to 12 months, depending on staff capacity, availability of data, and level of public engagement. Project costs include staff time and possibly consultants to support the development 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. Planning departments or offices that lead climate and/or sustainability efforts are often responsible for managing climate action planning processes. Cross-department involvement is recommended as a strategy to foster understanding of the CAP and build internal support for implementing it.

E. How to obtain points for this action

	POSSIBLE POINTS
Plan: Develop and adopt a local government operations climate action plan that is consistent with the requirements described here.	12
Public outreach: Provide an opportunity for the public to review and comment on the draft climate action plan.	4

F. What to submit

Submit a government operations CAP that was completed within 10 years of the application date. At minimum, the CAP must include the results of the government operations GHG inventory, at least one GHG reduction target specific to the local government, and a set of prioritized initiatives for reducing GHG emissions from government operations.

The government operations CAP can be a standalone document, or it can be integrated into another plan, such as a comprehensive plan, clean energy plan, or sustainability plan.

Provide documentation that the final CAP was officially adopted by the local government and released to the public. For example, the CAP could be posted on a government website or made available for review at a local library.

If seeking points for public outreach, provide documentation that, at minimum, a draft of the CAP was made available for review and comment by the public. Documentation of other outreach efforts such as public meetings is encouraged. Such documentation can be submitted either as part of the plan or as separate records.

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G. Links to additional resources or best practices

- CSC Climate Action Planning Guide: This 28-page guide introduces the concepts behind climate action planning and provides a framework for developing a plan to reduce GHG emissions. It includes information on creating plans for government operations and for the community.
- Science Based Targets Initiative: This initiative provides guidance on setting GHG targets that are science-based, meaning they are aligned with the GHG reductions required to keep global temperature increase below 2°C compared to preindustrial temperatures. The initiative is focused on private companies, but the methods are applicable to local governments who want detailed methods for setting science-based GHG targets.

H. Recertification requirements

Submit a government operations CAP that was developed or updated within 10 years of the application date and that

meets the requirements described above. Updated plans must include evidence of implementation of the prior CAP, regular monitoring of progress toward meeting the GHG targets, and re-evaluation of targets and strategies against current state policies and technologies.

NEW YORK STATE OF OPPORTUNITY. | Climate Smart Communities

PE2 Action: Community Climate Action Plan

16 Points | BRONZE PRIORITY | SILVER PRIORITY

A. Why is this action important?

A climate action plan (CAP) is a strategy document that sets goals and outlines a set of initiatives that reduce greenhouse gas (GHG) emissions. Using a GHG emissions inventory as the foundation, a CAP defines GHG reduction targets and identifies priority actions. By providing a framework for achieving the GHG targets, the CAP facilitates coordination between broader community engagement and local government leadership. In addition, the CAP supports effective action over time because it establishes methods for assessing progress and adjusting the local strategy if GHG targets are surpassed or not fulfilled. Development of the CAP and monitoring progress provide a focusing mechanism for the local Climate Smart Communities (CSC) task force. (See *PE1 Action: CSC Task Force*).

Local governments are encouraged to incorporate climate adaptation strategies into their CAPs. However, under the CSC Certification program, points for climate adaptation planning are awarded under Pledge Element 7: Enhance community resilience to climate change.

B. How to implement this action

For detailed guidance on implementation, download the CSC Climate Action Planning Guide. The information below provides an overview of the process and key components.

The CAP must include the results of the community GHG inventory. See *PE2 Action: Community GHG Inventory* for details on how to complete this prerequisite. Emissions forecasts (often included in the GHG inventory process) are also useful during climate action planning, because such forecasts anticipate shifts in emissions caused by population change, technological developments, or economic impacts.

The CAP must include at least one GHG reduction target. Some communities find it valuable to set more than one target; they often establish short- and long-term targets. The short-term targets help to ensure that action is taken in the near term, whereas long-term targets can set the stage for major planning initiatives and investments designed to dramatically reduce energy use and emissions. New York State's targets for reducing GHG emissions are 40 percent by 2030 and 80 percent by 2050 (below 1990 levels). Local governments are encouraged to align their targets with state goals.

The basic steps to create a local climate action plan (CAP) are as follows:

1. Determine leadership and CAP framework.
2. Develop communication and engagement strategy. (This CSC action requires public review of the draft community CAP.)
3. Complete and analyze baseline assessments.
4. Identify goals and GHG reduction targets.
5. Identify existing and potential initiatives.
6. Prioritize initiatives.
7. Create a plan for implementing the chosen initiatives.
8. Establish metrics.
9. Write the CAP, adopt it, and make it publicly available.

C. Time frame, project costs, and resource needs

Crafting a community CAP takes about six to 12 months, depending on staff capacity, availability of data, and level of public engagement. Project costs include staff time and possibly consultants to support the development 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. Planning departments or offices that lead climate and/or sustainability efforts are often responsible for managing climate action planning processes. Cross-department involvement and support are recommended. Local staff with expertise in facilitating stakeholder engagement, like public relations officers or communications staff, are important in coordinating the public outreach component of the community climate action planning process. The local CSC coordinator and CSC task force should play key roles in the creation of the community CAP and in monitoring implementation of the CAP.

E. How to obtain points for this action

A community CAP that is consistent with the requirements described here is eligible for a total of 16 points.

F. What to submit

Submit a community CAP that was completed within 10 years of the application date. At minimum, the CAP must include the results of the community GHG inventory, at least one community-wide GHG reduction target, and a set of prioritized initiatives for reducing GHG emissions from the community as a whole. The community CAP can be a standalone document, or it can be integrated into another plan, such as a comprehensive plan, clean energy plan, or sustainability plan.

Provide documentation that the final CAP was officially adopted by the local government and released to the public. For example, the CAP could be posted on a government website or made available for review at a local library.

For public outreach, provide documentation that, at minimum, a draft of the CAP was made available for review and comment by the public. Documentation of other outreach efforts such as public meetings is encouraged. Such documentation can be submitted either as part of the plan or as separate records.

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G. Links to additional resources or best practices

- CSC Climate Action Planning Guide: This 28-page guide introduces the concepts behind climate action planning and provides a framework for developing a plan to reduce GHG emissions. It includes information on creating plans for government operations and for the community.
- DEC CSC Develop a Local Climate Action Plan
- ICLEI - Local Governments for Sustainability USA, Inc.: ICLEI has a comprehensive GHG tool called ClearPath for conducting GHG inventories, forecasts, monitoring, and climate action planning at the community or government operations scale. Membership in ICLEI involves an annual fee based on municipal size and includes access to ClearPath.
- Science Based Targets Initiative: This initiative provides guidance on setting GHG targets that are science-based, meaning they are aligned with the GHG reductions required to keep global temperature increase below 2°C compared to preindustrial temperatures. The initiative is focused on private companies but the methods are applicable to local governments who want detailed methods for setting science-based GHG targets.

H. Recertification requirements

Submit a community climate action plan that was developed or updated within 10 years of the application date and that meets the requirements described above. Updated plans must include evidence of implementation of the prior CAP, regular monitoring of progress toward meeting the GHG targets, and re-evaluation of targets and strategies against current technologies and state policies.