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 (NYS). The 2015 New York Community and Regional Greenhouse Gas Inventory Guidance is a collection of methods and data sources applicable to the state that was created by the NYS 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 cases,

the NYS 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). It is acceptable under the CSC program to either use eGRID or follow the guidance that NYSERDA currently has in place regarding Scope 2 emissions factors.

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. The community module of the US EPA Local GHG Inventory Tools is a free tool that is compliant with standard protocols.

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. One example is the community module of the US EPA Local GHG Inventory Tools. Contact climatesmart@dec.ny.gov with questions about other free tools.

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 published (i.e., released to the public) within five years prior to the application date. (The baseline year for the GHG data can be from any point in the past.)

The report must include a section describing the methodology and how it complies with established protocols. 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.

Community GHG inventory reports that draw on the 2010 data from the NYSERDA-funded regional inventories are eligible for points under this action, provided that the following **additional** requirements are met:

- The report clearly presents the GHG data that is relevant to the community that is applying for CSC certification. (I.e., submitting the entire regional inventory report, without separating out the data that is specific to the community, is not acceptable.)
- The report includes a short narrative that explains the inventory results to the public and briefly describes how the GHG data relates to the community's profile and its goals. (I.e., submitting a spreadsheet of numbers is not sufficient.)

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

- [Regional Greenhouse Gas Inventories in New York State](#)
- [US EPA Local GHG Inventory Tools](#): Download free tools and learn about completing GHG inventories for your entire community or for local government operations.
- [Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) - An Accounting and Reporting Standard for Cities, 2014](#)
  - For an overview of the GPC, see https://ghgprotocol.org/greenhouse-gas-protocol-accounting-reporting-standard-cities
- [Utility Energy Registry (UER)](#) - The UER offers streamlined, public access to utility-reported data on community-level electricity and natural gas consumption. All UER data is free and open source.
- [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.

H. Recertification requirements

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