

Climate Change Advisory Committee
Recommendations for Completing a Greenhouse Gas Inventory
(December 18th, 2017)

Section 1: Recommendations

The CCAC makes two recommendations in relation to completing a greenhouse gas (GHG) inventory:

1. The City Council should affirm the following two goals that are already contained in the City's Comprehensive Plan or Council resolutions: (A) The City will meet or exceed the existing commitments the City has made in relation to GHG reductions; (B) The City will, following completion of a GHG inventory, identify discrete emission reduction targets in specific source sectors.

2. The City Council should authorize the CCAC, in consultation with City Staff, to take the steps necessary to complete a GHG inventory including authorizing the expenditure of funds needed to join ICLEI and hire a consultant to complete the GHG inventory.

Section 2: Background

The Climate Change Advisory Committee (CCAC) was created by the City Council under BIMC 2.37. Section 2.37.030 directs the CCAC to do the following, among other actions:

C(1): Provide advice and/or recommendations to the city council or city staff, as appropriate, on methods of completing a baseline island-wide greenhouse gas (GHG) inventory for the city.

C(2): To the degree directed by the city council, assist with or manage the completion of a baseline island-wide GHG inventory

The following document provides recommendations on conducting a GHG inventory (C(1)) and discussions how the CCAC could assist with or manage the GHG inventory (C(2)). The document contains three sections. Section 3 provides a summary of recommendations for completing a GHG inventory. Section 4 provides a more in-depth discussion of the deliberation by the CCAC on the GHG inventory. Section 5 discusses next steps in general for the CCAC and specifically the GHG inventory. Appendix A provides an update on the progress of the CCAC including a workplan for our first year.

Section 3: Summary of GHG Inventory Recommendations

The CCAC is requesting that the City Council authorize initiating a GHG inventory with the details provided below.

- The inventory should cover both City operations and the community at large.
- The City should join ICLEI and utilize their “US Community Protocol for Accounting and Reporting GHG Emissions” for conducting the inventory. The cost to join ICLEI is \$600/year.
- The City should contract out the initial inventory. The CCAC estimates the GHG inventory could cost \$10,000 - \$15,000 and take 1-3 months from the time the contract is approved. The costs would be on the lower end of that range if the City can help collect and organize the data.
- The CCAC will work with City staff to minimize the time they need to work on the GHG inventory by the following: 1) assist in the development of a request for proposal; 2) review applicants; 3) work with the selected contractor to complete the inventory; 4) oversee work of contractor as appropriate; and 5) review and comment on draft reports.
- The CCAC will work to develop a community engagement plan on increasing awareness about climate change.
- The inventory should be updated every three years by City staff.

Section 4: Discussion

When developing a GHG inventory there are several questions that must be addressed. Each of these questions is discussed below along with the options considered, a discussion of each option, and the rationale for selecting the option.

Question 1: What are we trying to achieve?

The CCAC believes it is important to establish concrete goals for what we are trying to achieve on the Island in terms of addressing climate change and reducing GHG emissions. An overarching goal should be to meet or exceed the existing commitments the City has made in relation to GHG reductions, including but not limited to the Paris Agreement and the U.S. Conference of Mayors Climate Protection Agreement.

After completing the GHG inventory, the City should identify discrete emission reduction targets in specific GHG source sectors (e.g., transportation and land use; energy supply; building energy consumption; water and waste management; and forestry).

Question 2: How will the inventory be used?

This question is important because it helps address why we are doing the inventory. The committee believes there are multiple reasons for completing a GHG inventory as indicated in Table 1.

Table 1: How will the inventory be used?

Objectives	Discussion
Help establish GHG reduction targets	The inventory is critical information for establishing GHG reduction targets. Targets are important to provide tangible goals for reducing GHGs.
Inform City policies	The inventory can be used to identify those sectors where the majority of GHGs are produced. This can help the City target those areas that would be the most important to address in terms of reducing GHGs.
Educate citizens	The inventory can be used to provide citizens guidance on areas where they can reduce their GHGs.
Work with other jurisdictions	The inventory can help if the City Council decides the City should participate in regional climate change efforts.

Question 3: What is the scope for the inventory?

This question is important because it helps define what will be addressed in the inventory. The committee believes it is important that the scope includes an inventory that covers both City operations and the community as a whole as outlined in Table 2. This would also include the other taxing authorities on the Island (i.e., schools, parks, fire, and library).

Table 2: What is the scope for the inventory?

Objectives	Discussion
City Operations	City operations are crucial because the City Council and City Manager are authorized to make changes.
Community wide	To be more relevant to Island residents the inventory needs to include community emissions. While the City has limited control over the actions of individual citizens, it can provide education and incentives for citizens to reduce their GHG emissions. It will also be important to bring in the other taxing jurisdictions: schools, parks, fire, and library.
County wide	Fortunately, a Kitsap County GHG inventory has been completed for the Puget Sound Clean Air Agency by Cascadia Consulting though it is not yet published. It does not disaggregate the GHG emissions from Bainbridge Island, but it could be used as a comparison with results from the BI inventory especially with respect to per capita GHG emissions.

Question 4: What type of inventory?

There are two basic types of inventories: geographic-based and consumption-based. A geographic-based inventory accounts for all the GHG emissions released within a specific geographic boundary and can include other emissions outside the boundary such as those associated with air travel and electricity generation. A consumption-based inventory takes into account the embedded emissions in the goods and services a community consumes such as the production, transport, sale, use, and disposal of goods and services – no matter where they are produced.

The committee believes that the best approach is to use both types of inventories. We suggest using the geographic-based as the main approach but supplement that with information from consumption-based inventories that have been completed by King County and other entities.

Table 3: What type of inventory?

Options	Discussion
Geographic Based	The geographic-based is the most widely utilized with excellent protocols for completing. It does not capture the actions of individuals as well as the consumption-based inventory.
Consumption Based	The consumption-based inventory is useful for helping communicate how individual’s choices are driving GHG emissions better than geographic based inventory. While these inventories have been completed (e.g., King County) the protocols for completing them are not as robust.
Hybrid	A hybrid approach is possible by completing a geographic-based inventory and using existing information available (e.g., Cool Climate Berkeley and King County) to provide rough estimates on consumption related to GHG emissions.

Question 5: What protocol do we use?

There are several standard protocols that could be followed. The advantage of following a standard protocol is to: 1) make the process more rigorous and in some cases, maybe a bit easier, to the extent you don’t have to figure everything from scratch; and 2) be able to formally report GHG emissions to various initiatives or registries (e.g., the Climate Disclosure Project). The committee believes the best protocol is the ICELI Community Protocol because it is well established, and it covers both City operations and community-wide emissions.

Table 4: What protocol to follow to complete inventory?

Options	Discussion
Global Protocol for Community-Scale	This is the gold standard. It provides detailed reporting consistent with the Intergovernmental Panel on Climate Change guidelines. It

Options	Discussion
Emissions.	requires reporting on 8 categories of GHGs, 22 sectors, and 3 different scopes. It is useful if you want to report GHG emissions internationally, and join various “mayor” alliances on climate change. This protocol is expensive and beyond what we need.
ICLEI – Community Protocol for Accounting and Reporting GHG Emissions.	The inventory provides detailed, focused guidance on completing a GHG emission inventory in the USA. It includes emissions from businesses, residents, and transportation and is relatively low cost.
ICLEI – Local Government Operations Protocol	This inventory provides detailed guidance on accounting for emissions from the buildings, facilities and vehicles operated by a local government. This protocol is focused on local governments only and therefore insufficient for our needs.

Question 6: What are the costs and timeframes to complete?

The CCAC recommends contracting out the completion of the GHG inventory for several reasons.

- City staff do not have the time or expertise to complete the inventory,
- The inventory would be completed in a more timely fashion (1-3 months from the time of contract approval) if contracted out.
- The most difficult and time consuming task of an inventory is the collection and organization of the data. There are several firms who have used the ICLEI protocol and know where to find the necessary data.
- While the members of the CCAC can assist in all aspects of the process (e.g., developing RFP, selection of contractor, oversight of contractor, and review of reports), the members do not have the time to complete the inventory.
- It is critical that the initial inventory is of high quality, timely, and objective.

The costs for a geographic-based inventory for a community the size of Bainbridge is estimated to be between \$10,000 - 15,000 and will take 1-3 months to complete from the time the contract is approved. The costs would be lower if the City can help collect and organize the data. The CCAC would work with the contractor to incorporate the consumption-based inventory.

In terms of City staff time, it is difficult to estimate an exact number of City staff hours needed, but the CCAC will help minimize the Staff time as much as possible.

- CCAC can draft the RFP, but staff will need to be involved in reviewing.

- At least one staff member will need to be on the RFP review panel along with CCAC members. To ensure the proposals are short, we can limit the number of pages per proposal (e.g., 5 pages). The number of hours will depend on the number of proposals.
- A staff person would need to manage the contract and be the point of contact.
- A staff person would need to review draft reports, but the majority of review could be completed by CCAC members.

Section 5: Next Steps

CCAC members are available to brief the City Council on our recommendations. In the interim, we will continue to work on identifying the best management practices for reducing GHGs on the Island, working with City staff to better understand how they are addressing the elements in the Comprehensive Plan related to climate change including how the CCAC can assist them, and start working on a community-wide education program on climate change in collaboration with existing organizations.

Appendix A: Status of CCAC - The CCAC has held four meetings and has accomplished the following:

- Developed a workplan for our first year (see below);
- Initiated a process to develop a better understanding of how the City is currently addressing the areas of the Comprehensive Plan related to climate change and had an initial conversation with City staff;
- Reached out to the City to determine how to make our working documents and deliberations accessible and transparent to the public;
- Established four subcommittees to identify/explore best practices for reducing GHG emissions in the waste, transportation, and electrical generation sectors and a subcommittee on climate adaptation across all sectors; and
- Developed recommendations for City Council consideration for moving forward with completing a GHG inventory.

Climate Change Advisory Committee Workplan

Task	Goal	Actions	Timeline
1	GHG Inventory recommendation	<ul style="list-style-type: none"> • Explore options of scope and process • Consider how to link to other community values • Make recommendation to City Council 	December 2017
2	Assist/manage baseline inventory	<ul style="list-style-type: none"> • Review option selected by Council • Advise on process • Review interim products (e.g., workplan, assumptions) 	TBD based on Council timeframe
3	Provide advice/recommendations related to City GHG emission reduction targets	<ul style="list-style-type: none"> • Determine goal for target (% , components) • Evaluate pathway to meet target • Determine metrics for monitoring progress 	January - June 2018
4	Work with City Staff, as appropriate, to complete and recommend to the city council a city climate action plan and implementation policy	<ul style="list-style-type: none"> • Determine goal for plan • Assess existing elements in established plans • Recommend how best to meet goal and monitor progress 	November 2017 – June 2018

Task	Goal	Actions	Timeline
5	Provide advice and/or recommendations to the City Council or City staff, as appropriate, on how to measure progress toward meeting the City's GHG emissions reduction targets and adaptation actions	<ul style="list-style-type: none"> • Review inventory of targets and action commitments • Recommend process for implementation • Recommend metrics for monitoring progress 	January – June 2018
6	Assist the City with participation in regional climate change efforts	<ul style="list-style-type: none"> • Review inventory of current city commitments and regional opportunities • Evaluate these are achievable and meet our existing targets and goals • Recommend metrics for monitoring progress 	February 2018
7	Provide education and outreach to the public regarding the committee and the City relating to climate change	<ul style="list-style-type: none"> • Consider traditional avenues • Consider novel avenues that merge non-traditional partnerships (e.g., art and climate with BPA or BIMA) 	On-going, plan for 1 st event in early 2018