

ecoCity Footprint Tool

...ecological and carbon footprint analysis for achieving one planet living



Pioneering cities are seeking to tackle one of the root causes of global ecological overshoot and climate change: our individual and collective consumption choices and habits. Yet, their ability to move towards more sustainable patterns of consumption is often hindered by data and resource barriers. Cities are also burdened with excessive reporting requirements, which take critical time away from program implementation efforts.

The ecoCity Footprint Tool will help cities overcome data and resource barriers, and it will help them identify what is required to tackle climate change and ecological overshoot. A prototype version of the ecoCity Footprint Tool, developed by Dr. Jennie Moore, Associate Dean at BCIT, has already been used to create the City of Vancouver's ecological footprint and consumption-based greenhouse gas (GHG) emissions inventory. The outputs from the Tool are highly valued by the City, and are informing the strategies, actions, and monitoring methods for their "Greenest City 2020 Action Plan".

How It Works

The ecoCity Footprint Tool is a user-friendly database that draws on community-based information to create an ecological footprint, a consumption-based GHG emissions inventory and an urban metabolism. The ecoCity Footprint Tool has been built to be applicable to any city, municipality or local government regardless of size, location, or level. Local government staff will be able to use data from the ecoCity Footprint Tool to identify activities and consumption habits that are having the greatest impact on their community's footprint and GHG emissions. Using the Tool, they can also forecast which policy interventions can best reduce these impacts.

What is a Consumption-based Emissions Inventory?

A consumption-based emissions inventory provides a comprehensive assessment of the total emissions resulting from a region's activities, including those that occur outside of its borders. Typical emissions inventories include only emissions from sources within a given region's borders, but with the globalization and integration of our economy a significant amount of the emissions associated with the production, disposal and transport of a jurisdiction's goods occur in other regions.

ecoCity Footprint Tool Benefits

It is envisioned that the Tool will help communities:

- Create an updated community-wide GPC (Greenhouse Gas Protocol for Cities) compliant GHG emission inventory. (This will help cities that are signed on to the Covenant of Mayors for Climate & Energy (formerly the Compact of Mayors) meet their monitoring and reporting commitments.).
- Create a consumption-based GHG emission inventory.
- Identify the community's Ecological Footprint.
- Explore policy and planning interventions to reduce territorial and global GHG emissions, and its ecological footprint.
- Demonstrate leadership in working towards more sustainable patterns of consumption.

ecoCity Footprint Tool Pilot Project

In 2017, BCIT will pilot the ecoCity Footprint Tool with five communities. This will be an opportunity to test refinements being made to enhance the Tool's functionality for communities, including:

- Modifications to ensure compliance with international standards, including the aim to align with the GPC (Greenhouse Gas Protocol for Cities).
- Pre-populating the Tool with data sources to minimize the reporting burden of communities.

The pilot project will also include scoping for the creation of an on-line version of the Tool that will be freely available to communities.

For more information please email us at ecocityfootprint@bcit.ca.