

Draft 2007 Community Energy and Emissions Inventory (CEEI)
March 24th 2009 Local Government Webinar
Questions and Answers

The following Questions were either raised on the March 24th CEEI Webinar for Local Governments or submitted immediately following by Webinar participants, with Answers below. Should you wish to pursue any of the queries below, or others, please call Ted Sheldon (250-387-4773) or Michael Wilson (604-886-9864), or email CEEIRPT@gov.bc.ca:

Q: Has there been any research into including materials or products consumption based greenhouse gas emissions in the CEEI (using lifecycle analysis)? The Oregon Department of Environmental Quality and the Stockholm Environmental Institute are currently doing some innovative work in the area at the community scale.

A: Embedded energy and emissions is not something that has been considered for CEEI up to now as the initiative and existing community-wide protocols are primarily focused on Scope 1 and Scope 2 emissions. Research in this area is still ongoing and is not sufficiently developed and agreed upon for application at this time. However, thank you for the aforementioned two resources and we will look into these as we move forward on this substantive aspect of greenhouse gas emissions accounting.

Q: How can Local Governments contribute to the effort to obtain more accurate data and improve the CEEI reports?

A: One of the principles of CEEI is 'continuous improvement'. The CEEI Working Group will continue to explore the scope of the initiative, the detail to which data can be made available and its accuracy. Given the scale of the CEEI initiative (providing draft Reports to all BC Regional Districts and Municipalities), Local Governments are encouraged to bring any perceived sector inaccuracies to the Province's attention (particularly if you have undertaken a previous community-wide inventory). This includes solid waste, where better local data may be available to update the draft 2007 CEEI Reports. For your information, the Ministry of Community Development is undertaking a complementary 'secondary indicators' initiative – Green Communities Incentive System – with active participation from a number of Local Government representatives.

Q: Is there any future potential for finer geographic inventories in larger Municipalities based on neighbourhood, census tract, etc?

A: At this time CEEI is working to improve the accuracy of information at the Municipal level, prior to considering information at finer geographic levels. While CEEI may look to its valued partners to explore this type of detail in the future, confidentiality concerns (e.g., protecting the privacy of personal information) will undoubtedly guide those efforts. Larger Municipalities that wish more detailed information should presently work with their Regional Districts, utilities and other data providers to develop further breakdowns.

Q: We have a cement kiln in our community that uses coal and waste tires for fuel. It is my understanding that GHG emissions from this facility from combustion and chemical processes are almost 1 million tonnes. These fuels were not mentioned in fuels that were under consideration - will further work be done to include some of these larger sources in the inventory?

A: CEEI is looking at what other fuels to include in future updates, as well as non-energy emissions. Future inclusion will depend on the availability of data, the level of local government influence, competitive rights of industry, and the emerging Provincial Cap-and-Trade initiative.

Q: Why are you utilizing emission factors from IPCC and not nationally-derived emission factors for natural gas?

A: CEEI is using emissions factors for fuels from the 2006 National Inventory, and not from IPCC. This has now been corrected in the *draft* User Guide.

Q: How does BC Hydro generate their electricity emission coefficient values?

A: BC Hydro includes all emissions produced from their own operations, including electricity generation, buildings, vehicles, and fugitive emissions. They also include electricity generation emissions produced by Independent Power Producers. To calculate the GHG intensity they divide these emissions by the total electricity produced from BC Hydro facilities and Independent Power Producers. The GHG intensity does not include power purchases from outside British Columbia. For more information see the BC Hydro website: www.bchydro.com/about/company_information/reports/gri_index/environment.html.

Q: What workshops are being planned for local governments?

A: CEEI orientations will be a component part of upcoming May and June 2009 Regional workshops (i.e., "Implementing Bill 27 Requirements" - target setting, policies and actions) being planned by the Ministry of Community Development and partners. Keep an eye on the CEEI Reports website (<http://www.env.gov.bc.ca/epd/climate/ceei/a-z.htm>) for workshop notifications.

Q: Please clarify what is included in the 'residential buildings' category. In future, will any be included in the 'commercial buildings' category as was the case for 2007?

A: The 'residential' category includes all single family homes. It also includes electricity consumption for the vast majority of multi-family homes. However, most large multi-family buildings with a single natural gas meter are classified as 'commercial' and, as such, included in that CEEI sub-sector. The CEEI Working Group will be working with our natural gas utilities on this issue going forward.

Q: Please explain why rail, marine and air may be assigned to our community data?

A: International community-wide inventory protocols under development may call for the inclusion of rail, marine, or air transport. In addition, many Local Governments are interested in these emissions and what potential actions may be taken to reduce them. However, the inclusion of these sectors will not necessarily be straightforward and guidance from BC Local Governments will be a prerequisite for such consideration going forward.

Q: Can I view a map of the postal codes overlap?

A: The Province is not able to provide postal code maps as they are copyrighted material. However, maps of postal code boundaries are available for purchase from private companies, although they tend to be fairly expensive. You can look up the postal codes and streets associated with your Municipality on the Canada Post website: www.canadapost.ca/business/tools/pcl/bin/advanced-e.asp.

Q: Under Land-use Change - will pine beetle effects be seen there?

A: The Land-use Change sector only includes deforestation caused by human activities that results in a permanent conversion of land from forested to non-forested. Natural events such as the pine beetle or logging that is subsequently replanted are not included.

Q: When will White Rock data be posted?

A: Reports for White Rock/Surrey and for the City/District of North Vancouver were not posted as the Terasen Gas data has not yet been split out between these pairs of communities. We hope to have individual Municipal data for these communities by the end of April (with an interim solution in early April).

Q: In your 'next steps' considerations have you explored an ability for communities to benchmark their data? For example, have you considered comparative ratios (e.g., per capita)?

A: Although no benchmarking of data nor per capita ratios are presently available at a community level through CEEI at this time, Local Governments can calculate their own per capita ratios using population data from BC Stats (www.bcstats.gov.bc.ca/DATA/pop/popstart.asp). The CEEI Working Group urges caution in comparing CEEI data to either benchmarks or other communities. There are many reasons why emissions may differ significantly, including weather and location of industry/businesses, as well as the existing accuracy of the CEEI data (e.g., boundary issues) and how it is presented (e.g., with or without some utilities data withheld). Even so, once all 2007 CEEI Reports are completed, the CEEI Working Group is considering generating a provincial average for data consistently available to all communities (e.g., residential buildings).

Q: Will the Webinar presentation be distributed/available after the webinar?

A: Yes, the March 24th presentation has been e-mailed to participants, and it has also been posted on the CEEI reports website (<http://www.env.gov.bc.ca/epd/climate/ceei/a-z.htm>).

Q: Why wasn't fuel sales data used? A large number of vehicles are now leased, so registered in a community other than where the vehicle is operated.

A: Both methods of estimating transportation emissions (fuel sales and vehicle registrations) have advantages and drawbacks. Fuel sales data is expensive to obtain, not available for all BC communities, and usually does not include commercial cardlock sales. It also can be misrepresentative for communities that have a lot of pass-through traffic or have a large population that is outside the Municipal boundary but purchase gas within it (including adjoining Municipalities). Estimating emissions based on vehicle registrations was considered the most

cost effective and practical method for a province-wide inventory system (see <http://www.env.gov.bc.ca/epd/climate/pdfs/ceei-comparison-study.pdf>).

Q: Are there any plans to incorporate fuel used in flights taken by British Columbians? This is a significant generator of GHGs and the impact of these GHGs in the upper atmosphere is much higher than fuels burned at ground level.

A: Air transport, as well as marine and rail, is under consideration for future CEEI reports.

Q: Are there examples of existing corporate [as opposed to community-wide, or CEEI] inventories and related GHG climate action plans that the Province would deem as acceptable under Bill 27? Could these be posted on the Toolkit website for people wanting to get a corporate inventory head-start?

A: For clarification, Bill 27 does not require corporate inventorying. Carbon neutrality in local government operations is a commitment made under the Climate Action Charter. It is anticipated that further information about local government corporate inventorying will be available later this year. The Climate Action Toolkit website outlines the proposed services which constitute the boundaries of corporate operations in terms of "traditional" services (see <http://www.toolkit.bc.ca/carbon-neutral-government>). While the boundaries have not been finalized, local governments can begin collecting data on energy use from these traditional service areas. This information base can be used to then inform strategic allocation of resources for energy and GHG emission reduction planning. As local governments go through the process of capturing their energy use, the Climate Action Toolkit could include stories and tips on those experiences for the benefit of other communities.

Q: Will biomass being used for building-specific heating or district heating be considered carbon neutral (i.e., will it be assumed that biomass burned will be replaced by biomass that is absorbing CO₂)?

A: Yes, for purposes of Local Government inventories in BC, biomass burned for heat or power generation is considered carbon neutral.

Q: Is there any movement to get fuel providers to disclose delivery volumes coming from various postal codes (i.e., for oil and propane)? Are there any provincial requirements to cover this?

A: The CEEI Working Group has considered the possibility of collecting fuel oil and propane data directly from fuel providers but, given the multitude of providers province-wide, this would be a difficult and onerous undertaking. No consideration has yet been given to mandatory reporting of fuel deliveries by community. CEEI is looking at estimating consumption of heating oil and propane to provide a fuller emissions picture to Local Governments, though the approach would not lend itself to annual updating.

Q: There was no asterisk next to the City of Quesnel inventory, am I to assume that there was clear postal code distinctions between the City of Quesnel and the balance of the Cariboo Regional District?

A: If your community did not have an asterisk beside it on the website, or listed in the draft User Guide as having boundary issues, then it was not considered to have significant issues with postal code boundaries. This does not mean there are no postal codes that cross the Municipal boundary, just that the data fell within what was considered to be a reasonable range.

Q: Can you estimate what percentage of GHG emissions are missing due to non utility fuels, cement, non road vehicles - perhaps as a provincial average?

A: From the 2006 National Inventory Report (NIR), transportation is 35% of total BC emissions. On-road transportation accounts for 64% of this, while rail/marine/air accounts for 19%, off-road for 14% and pipelines for 3%. Industrial processes (cement, lime, aluminum, and undifferentiated production) account for 4.4% of total BC emissions. Heating oil, propane and coal are not broken out in the 2006 National Inventory report, but are estimated at 3.1% of residential emissions, according to NRCan's Office of Energy Efficiency.

Q: Regarding the 50% rule, why not put "information withheld" instead of a dash in the CEEI Reports?

A: This has been a limitation of the database that we are currently working to resolve.