Becoming Carbon Neutral

Guidance on Including Contracted Emissions in Local Government Corporate Inventories

April 2012

BRITISH COLUMBIA

UBCM

Contents

Acknowledgements

This guidebook was prepared by the Green Communities Committee, based on input and feedback received from B.C. local governments as part of the ongoing collaborative process to determine the common approach to carbon neutrality, and from UBCM and Provincial staff including Jessica Brooks, Rejan Farley, Ben Finkelstein and Jared Wright.

Writing and editing services were provided by Judith Cullington & Associates.

Glossary

B.C. Climate Action Charter: A voluntary agreement signed by local governments in British Columbia (B.C.). Signatories commit to working to achieve three goals: becoming carbon neutral in respect of their operations; measuring and reporting on community greenhouse gas (GHG) emissions; and creating compact, complete and energy-efficient communities.

Carbon neutral local government: For the purposes of the Climate Action Charter, a local government is carbon neutral if it has (1) calculated the total emissions for which it is responsible; (2) pursued actions to minimize those emissions; (3) balanced and / or offset all remaining emissions; and (4) reported publicly on their results.

Climate Action Revenue Incentive Program (CARIP): A grant program available to local governments who have signed the B.C. Climate Action Charter that provides a grant equal to one hundred percent of the carbon tax paid by local governments as a direct expenditure. Local governments are required to make their CARIP reports public.

Contracted emissions: For the purposes of the Climate Action Charter, contracted emissions are those GHG emissions generated by the consumption of fossil fuels in the delivery of a traditional service by a third party (e.g. a contractor).

Green Communities Carbon Neutral Framework: A B.C.-specific Carbon Neutral Framework developed by the Green Communities Committee to enable local governments to meet their Climate Action Charter goal of carbon neutrality.

Green Communities Committee: A joint committee of the Province of British Columbia and the Union of BC Municipalities established under the Climate Action Charter with a mandate to provide tools and supports to assist local governments to meet their Climate Action Charter goals.

Greenhouse gas (GHG): A gas emitted to the atmosphere from natural sources and as the result of human activity. GHGs both absorb and reflect the sun's radiation. GHGs include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride.

Greenhouse gas emissions (GHGs):

Community Emissions: GHG emissions generated from community activities.

Corporate Emissions: GHG emissions generated through local government operations (see also local government corporate emissions boundary).

Included contracts: For the purposes of the Climate Action Charter and as of June 1, 2012, included contracts are all new and renewed contracts over $25,000 for the delivery of a traditional service other than administration and governance. Emissions from included contracts should be incorporated into a local government's corporate inventory on an annual basis.

Local government: In British Columbia, a term that includes both regional districts and municipalities.

Local government corporate emissions boundary: As defined in the Carbon Neutral Workbook, GHG emissions produced as a result of a local government's delivery of "traditional services", including fire protection, solid waste management, recreational / cultural services, road and traffic operations, water and wastewater management, and local government administration.

SMARTTool LG (for Local Government): SMARTTool is a web-based GHG emissions inventory and reporting tool which provides a standardized approach to calculating and reporting an organization's corporate GHG emissions. SMARTTool for Local Governments has been customized to meet the needs of local governments under the Green Communities Carbon Neutral Framework.

Section 1: Contracted Emissions

The majority of local governments in British Columbia have signed the Climate Action Charter, voluntarily committing to develop strategies and take actions to achieve three goals:

- Becoming carbon neutral[1] in respect of their corporate operations by 2012
- Measuring and reporting on their community GHG emissions; and
- Creating complete, compact and energy efficient rural and urban communities.

Guidance on how to work towards the achievement of carbon neutrality is provided in Becoming Carbon Neutral: A Guidebook for Local Governments; and the definition of the local government activities included within the corporate emissions boundary (i.e., what emissions local governments should be measuring) is provided in the Carbon Neutral Workbook (the Workbook).[2]

As noted in the Workbook, local governments are required to include greenhouse gas emissions (GHG) from some contracted services ("contracted emissions") as part of their carbon neutral commitment. This applies to new contracts and upon renewal of existing contracts as of June 1, 2012.

The Guidance on Contracted Emissions was developed by the joint Provincial–UBCM Green Communities Committee (http://toolkit.bc.ca/green-communities-committee-working-group-membership) in conjunction with local government practitioners. It aims to meet local governments' expressed interests in a practical approach that is fair and credible.

What Contracts are Included?

When reporting on contracted emissions, local governments should include contracts that are:

- new or renewals after June 1, 2012; AND
- over $25,000 in value in any calendar year; AND
- "in scope" based on the traditional services boundaries described in the Workbook EXCEPT FOR administration and governance services.

These are "included contracts". Note: once a contract has been established as part of the corporate inventory it should be included every year, for the entire term of the contract.

Traditional services included in the local government corporate emissions boundary are:

- Administration and governance
- Drinking, storm and waste water
- Solid waste collection, transportation and diversion
- Roads and traffic operation
- Arts, recreation and cultural services
- Fire protection

What Needs to be Tracked and Reported?

For included contracts, local governments are only required to track and report on contracted emissions that are derived from fossil fuel consumption used to operate vehicles, equipment and machinery. These include (but are not limited to) gasoline, diesel, natural gas, propane, and bio-fossil fuel blends.

---

1 Terms in orange are defined in the Glossary

2 Documents' are available from http://toolkit.bc.ca/resource/becoming-carbon-neutral-workbook-and-guidebook

Section 2: Accounting for Contracted Emissions

Requiring contractors to provide fuel consumption data encourages behavioural change by raising awareness of fuel consumption sources, costs and the associated GHG emissions, as well as impacts on local air quality. As contractors begin to understand where their emissions are coming from they are better able to minimize both their fuel costs and emissions (for example, through fuel switching, regular maintenance and right-sizing vehicles).

Planning ahead for the inclusion of contracted emissions in corporate inventories will:

- Make it easier for local governments to identify, collect and manage the emissions data coming from their contractors;
- Make it easier for contractors to understand what is required of them and to understand their role in corporate GHG reduction activities; and,
- Provide a basis for local governments to build relationships with contractors and encourage them to reduce their emissions over time, in ways that reduce costs for both contractors and local governments.

While these benefits may take time to be realized, undertaking this work demonstrates climate leadership by local governments and their contractors that will support broader behavioural change throughout their communities and regions.

The Green Communities Committee encourages local governments to follow the five-step best practices process outlined below, which supports early engagement between staff and contractors as well as ongoing tracking and monitoring of contract data. While it is possible to manage contracts from the “back end” (i.e., to collect and identify fuel consumption data at the end of each reporting year), this will be harder to do and can be avoided by planning ahead.

Table 1: The Five Steps

Step 1	Ensure that the appropriate staff are aware of the need to build requirements for contractors to track and report on the fuel consumed in the delivery of applicable traditional services on behalf of the local government.
Step 2	Build requirements for tracking fuel consumption into all Requests for Proposals for the delivery of applicable traditional services
Step 3	Include provisions in the contract requiring the contractor to provide fuel consumption data.
Step 4	Establish a process to ensure that staff tasked with managing the corporate emission inventory are aware of all new and renewed ‘included contracts’ and have access to associated fuel consumption data
Step 5	Report publicly on total corporate emissions and how the local government is working to reduce or eliminate those emissions.

Step 1: Build Staff Awareness

Make sure that all staff involved in contract negotiation or renegotiation processes are aware of the definition of “included contracts”, and the need to be able to collect fuel consumption data for these. It may be helpful to develop a corporate policy or provide organization-wide communications to staff, especially for larger organizations that have many different individuals involved in contract processes.

Step 2: Include Requirements Into RFPs

Local governments may wish to notify existing contractors that they will be required to track their fossil fuel consumption if / when their existing contracts are renewed. For new contracts, Requests for Proposal (RFPs) and tenders should note that this will be a requirement of the contract. This will clarify the local government’s expectations up front, and ensure that contractors are aware that this data will need to be provided as part of their contract.

Step 3: Build Provisions Into Contracts

In order to obtain fuel consumption data from contractors, as part of the contract negotiation or renegotiation process, it is recommended that local governments build provisions into included contracts that require the service provider to track and provide fuel consumption data to the local government.

The information below provides guidance on what data to request from contractors, and information on how to estimate contracted emissions in instances where direct data may not be available. Sample language that can be built into contracts to request fuel consumption data using either of these approaches is provided in **Appendix C**.

What Data to Request from Contractors

Local governments may use one of two options to gather data. While the first option (specific data) requires slightly more work on the part of the contractor, it will provide the local government with the most accurate representation of real fuel consumption and resulting GHG emissions, as well as detailed information to

identify possible GHG reductions. The second option (total fuel consumption) requires less work on the part of the contractor, but may result in some overstatement of total GHG emissions generated from that contract. Local governments should choose the approach that is the most suitable for them.

Option 1: Request Vehicle and Specific Fuel Consumption Data

Data required from the contractor:

- Vehicle class (heavy duty, light duty or off road—see **Appendix A** for a description of classes);
- Type of fuel used by each vehicle; and
- Amount of fuel consumed from the operation of vehicles, equipment and machinery for the contracted service.

This data will allow a local government to apply emission factors that are accurate for the type of fuel consumed by vehicle type.

Option 2: Request Total Fuel Consumption Data

Under this option the local government would request the following data from the contractor:

- Total fuel consumption from the operation of vehicles, equipment and machinery for the contracted service.

When entered into a carbon inventory and converted to CO_2e (GHG emissions using a carbon dioxide equivalent), the local government should **apply the emission factor for heavy diesel**. This represents a conservative estimate of the predominant vehicle and fuel type that is typically used to deliver contracted services.

Estimating Emissions When Actual Data Cannot be Provided

While local governments are encouraged to work with their contractors to get actual emissions data, it is recognized that in some cases this may not be possible. If this is the case, the local government may choose to use one of the estimation methodologies provided in **Appendix B**. While these methodologies will not generate an exact accounting of contracted emissions, they provide a reasonable proxy that a local government can utilize while they are transitioning to a point where they are able to collect actual reported data.

If a local government uses an estimation methodology to determine their contracted emissions for the reporting year, they will need to document the estimation methodology and resulting GHG emissions, and to complete, sign and make public a Contracted Emissions Template (**Appendix D**) that shows which methodology was used and the resulting annual GHG emissions. These templates should be made public before or at the same time local governments make their Climate Action Revenue Incentive Program (CARIP)

Reports public (see Step 5 for information on carbon neutral reporting).

Step 4: Track and Add New And Renewed Contracted Emissions

All emissions data from included contracts will need to be tracked and added to the local government's corporate inventory on an ongoing basis as the data becomes available.

Fossil fuel consumption data from new or renewed included contracts will likely be provided at various times throughout the year depending on when the contract was negotiated and the reporting schedule set up under the contract. It is recommended that local governments establish a process to manage incoming GHG emissions data in order to ensure that staff with responsibility for tracking the corporate inventory are aware of new and renewed included contracts and have access to fuel consumption data from those contracts. By tracking and entering contracted emissions throughout the year, local governments can better monitor the emissions intensity from a given contract on an ongoing basis, providing the basis for conversations with contractors about fuel consumption and the reduction of GHG emissions.

As with other aspects of the carbon neutral public reporting requirements, emissions from included contracts should be reported through the Climate Action Revenue Incentive Program (CARIP) and made public. Contracted emissions are identified as a separate line item in the reporting template.

Statement of Financial Information (SOFI)

If a local government has not established a process for tracking new and renewed contracts they may wish to refer to the list of suppliers of goods and services contained in their annual Statement of Financial Information (SOFI). Required under the Financial Information Act, a SOFI lists all of a local government's contracts over $25,000, so it can be used as a starting point to determine what contracts may need to be included in the corporate inventory.

Step 5: Report Publicly

CARIP reports and guidance on the CARIP Grant Program is available on the Province's CARIP website[3]. To be eligible for the CARIP program, local governments must make their CARIP reports for any given year public and submit them to the Province on or before **March 15** of the following year[4].

3 http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm

4 Note that the CARIP public reporting has recently been changed from December 31 to March 15 to provide additional time for local governments to gather the data required to publicly report on carbon neutrality for 2012.

Section 3: Changes to the Guidance on Including Contracted Emissions

The *Guidance on Including Contracted Emissions in Corporate Inventories* is a living document that may be amended or refined based on local government feedback and emerging best practices. To this end, when applying estimation methodologies for calculating fuel consumption, local governments should ensure that they are using the most up to date version of the Guidance. The most current version of the document will be located on the Climate Action Toolkit website at: http://www.toolkit.bc.ca/carbon-neutral-government

Local government feedback is an important part of ensuring that the approach to carbon neutrality meets the needs of its users, and the Green Communities Committee looks forward to receiving feedback. All comments and questions on this document can be directed to irpd@gov.bc.ca

Appendix A: Vehicle Class Descriptions

Vehicle Class	Includes:
Light Duty Vehicle	2 door passenger cars 4 door passenger cars Station wagons
Light Duty Truck	SUV's, minivans Full-size vans Pickup trucks with a gross vehicle weight rating (GVWR) under 3856 Kg (8500 lbs) and a curb weight under 2722 Kg (6000 lbs)
Heavy Duty Truck	Road vehicles with a gross vehicle weight rating (GVWR) over 3856 Kg (8500 lbs) and a curb weight over 2722 Kg (6000 lbs)
Off Road Vehicle	Vehicles and equipment not licensed for road use (e.g. snowmobiles, ATVs, lawnmowers and trimmers, tractors, construction equipment)

Appendix B: Estimating Contracted Emissions

In instances where a local government cannot provide actual emissions data for included contracts, they may choose to use an estimation instead. Recognizing local governments will have access to different types of fuel information, three different options for estimating fuel consumption have been developed:

- Option 1: Ask your contractor
- Option 2: Proxy fuel consumption value based on a sample of contracts
- Option 3: Vehicle/equipment type and hours or kilometers of usage

Each option should yield a reasonable proxy measure of the emissions from any given contract. It is expected that a local government will select the option that can be most reasonably implemented and that will yield the most accurate results given the particular circumstances and data available.

If a local government chooses to use one of these estimation methodologies, they will need to complete a Contracted Emissions Template (**Appendix D**) to indicate which methodology was used and the resulting annual GHG emissions from the local government's contracted services. Consistent with the timing for carbon neutral reporting, the Contracted Emissions Template will need to be made public on or before March 15.

Option 1: Ask Your Contractor To Provide An Estimate

This option is appropriate for local governments who may be able to get a reasonable estimation of fuel consumption directly from their contractors.

1. Compile a list of new and renewed contracts for the reporting year. (Refer to the SOFI Sidebar on page 9).
2. Review the contract list and exclude:
    a. All contracts that are out of scope, based on the traditional service boundaries described in the Workbook;
    b. Any contacts valued less than $25,000 in any calendar year; and
    c. Any contracts for administration and governance services.
3. Once a list of included contracts has been established, contact each of the contractors and request fuel consumption data. If the actual amounts are not available, the contractor may be able to provide a reasonable estimate based on their professional experience, familiarity with the operating equipment and time spent delivering the contract.
4. Convert fuel data to GHG emissions using SMARTTool or another carbon inventory and reporting tool. If a local government chooses to use a carbon inventory and reporting tool other than SMARTTool it must use the same emission factors and methodologies employed by SMARTTool as detailed in the "Methodology for Reporting B.C. Local Government Greenhouse Gas Emissions".[1]
5. Report publicly on contracted emissions through the carbon neutral reporting process (CARIP Report).

1 Available from Carbon Neutral Local Government under the 'HOW' tab: http://toolkit.bc.ca/cnlg

Option 2: Proxy Fuel Consumption Value Based On A Sample Of Contracts

This option is appropriate for local governments that have fuel consumption data for a limited sample of their contracts. This method incorporates a level of administrative ease when Option 1 is not feasible.

1. Open the 'Contracted Services Calculator' (available from http://toolkit.bc.ca/cnlg)
2. In the calculator, compile a list of new and renewed contracts for the reporting year:

    a) Consult with your financial officers to identify your local government's most current SOFI list (see sidebar on page 9); and

    b) Input your community's complete SOFI list in the calculator.

3. Review the contract list and exclude:

    a) All contracts that are out of scope, based on the traditional service boundaries described in the Workbook; and

    b) Any contacts valued less than $25,000 in any calendar year; and

    c) Any contracts for administration and governance services.

4. Take a 25% sample of the contract list.

    There are many different approaches that can be used to develop a sample of the contracts list. Local governments should select the one that seems to be the most reasonable based on the type and number of contracts that they are working with. For example:

    - Order the Step 3 contract list by dollar value, and use the highest 25% as the sample.

      OR

    - Using professional judgment, categorize each contract on the list according to their general level of emissions intensity. Once categorized, take a 25% random sample from each category.

5. For each of the included contracts identified in the sample and based on cost, determine what proportion of each one is fuel consumption (e.g., $16,000 in fuel costs for a $40,000 contract = 40%)
6. Calculate the average percentage of fuel consumption from the sample contracts. Input the average fuel estimate for the flagged sample into "Fuel % cost of overall contracted service cost" in the calculator and it will automatically apply this value to included contracts.
7. Report publicly on contracted emissions through the carbon neutral reporting process (CARIP Report).

Option 3: Vehicle/Equipment Type And Hours (Or Kilometres) Of Usage

This option is appropriate for local governments that are able to identify the type of vehicles and equipment being used to deliver their contracted services and the approximate number of hours (or kilometres) that they are in use during the term of the contract.

1. Compile a list of new and renewed contracts for the reporting year. (Refer to the SOFI Sidebar on page 9).

2. Review the contract list and exclude:

   a) All contracts that are out of scope, based on the traditional service boundaries described in the Workbook; and

   b) Any contacts valued less than $25,000 in any calendar year; and

   b) Any contracts for administration and governance services.

3. Examine your local government internal fleet by class (**Appendix A**) and assess:

   a) The total amount of fuel consumed for all vehicles in each corresponding class; and

   b) The total hours (or kilometres) of usage for all vehicles in each class.

   Based on this information, calculate average fuel use per hour (or per kilometre) for each class in your fleet (Equations 1 or 2).

   Equation 1: Fuel Type (L or Kg) class type / Time (Hour) class type

   Equation 2: Fuel Type (L or Kg) class type / Distance (Kilometre) class type

   Given that contracted services are typically calculated by billed hours, local governments can multiply the values derived from Equation 1 by contracted hours to estimate total fuel consumptions for contracted services that use vehicles of similar class. Alternatively, if contracted services track their kilometres, local governments can multiply the values derived from Equation 2 by contracted kilometres to estimate total fuel consumption for contracted services that use vehicles of similar class.

4. Convert fuel data to GHG emissions using SMARTTool or another carbon inventory and reporting tool.

   If a local government chooses to use a carbon inventory and reporting tool other than SMARTTool it must use the same emission factors and methodologies employed by SMARTTool as detailed in the “Methodology for Reporting B.C. Local Government Greenhouse Gas Emissions”.

5. Report publicly on contracted emissions through the carbon neutral reporting process (CARIP Report).

Appendix C: Sample Contract Language

Vehicle And Fuel Data

Requirement for fuel consumption data provision

Commencing on (*start date*) the (*name of local government*) will require (*name of contractor*) to communicate the quantity of fuel used to operate vehicles, equipment and machinery as part of the delivery of the services described in this contract on a (*frequency of reporting*) basis. Fuel consumption associated with the provision of these services must be provided to the (*name of local government)* within thirty (30) days of the following dates: (*dates on which fuel consumption data will be required by the local government*).

Data provided should include the following information:

- Number of vehicles, by vehicle class, used to deliver the contracted service (heavy duty, light duty, off road);
- Type of fuel consumed by each vehicle class (e.g. diesel / gasoline / natural gas / ethanol blend/ biodiesel blend); and
- Litres of fossil fuels consumed in relation to the service delivered under the contract in each vehicle class, up to the dates specified above.

Fuel Consumption Data

Requirement for fuel consumption data provision

Commencing on (*start date*) the (*name of local government*) will require (*name of contractor*) to communicate the quantity of fuel used to operate vehicles, equipment and machinery as part of the delivery of the services described in this contract on a (*frequency of reporting*) basis. Fuel consumption associated with the provision of these services must be provided to the (*name of local government*) within thirty (30) days of the following dates: (*dates on which fuel consumption data will be required by the local government*).

Appendix D: Sample Contracted Emissions Template

Reporting year: (*insert year*)

This form will be made available online at http://www.toolkit.bc.ca/carbon-neutral-government. Local governments may choose alternate formats to the template provided below; however the substance must be the same as those provided in the sample template.

Local Government Information	
Name of local government	
Designate Appointed to Sign Off on Estimation Template	Provide the name, phone and e-mail of the Project Designate duly authorized and having the legal capacity to sign off on this Template (e.g., CAO, CFO) Name _____ Title _____ Phone _____ Email _____
Estimation Methodology Information	
Rationale for Applying an Estimation Methodology	Describe why an estimation methodology is being used rather than reporting actual emissions data as provided by the contractor
Contracted Emissions	

For each contract, indicate (1) the name and value of the contract (2) the estimation methodology option(s) used, and (3) the estimated annual emissions associated with each contract, organized by traditional service area.

Estimation Methodologies

Option 1: Ask Your Contractor for an Estimate

Option 2: Proxy Fuel Consumption Value Based on a Sample of Contracts

Option 3: Vehicle/Equipment Type and Hours or Kilometers of Usage

Drinking, Storm and Wastewater	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS

Solid Waste Collection, Transportation and Diversion	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS

Roads and Traffic Operations	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS

Arts, Recreation and Cultural Services	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS

Fire Protection	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS

Estimated Contracted Emissions: Authorization and Sign Off

The information provided in this Contracted Emissions template is to the best of my knowledge correct and complete.

_____ _____

Designate Signature Date

_____

Title