

BECOMING CARBON NEUTRAL  
– B.C.'s PROVINCIAL PUBLIC SECTOR –  
2016 REPORTING YEAR



Ministry of Environment

Victoria, B.C.

January, 2017

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## **1. Introduction**

This document provides high-level guidance to provincial public sector organizations (PSOs) to help them meet their Carbon Neutral Government requirements as set out in BC’s [Greenhouse Gas Reduction Targets Act \(GGRTA\)](#) and the [Carbon Neutral Government Regulation](#).

Carbon neutrality involves **measuring** operational greenhouse gas emissions, **planning and taking action** to reduce emissions, **offsetting** the remainder, demonstrating leadership through annual **public reporting** of these achievements and undergoing independent **verification** to ensure completeness and accuracy.

These requirements apply to ministries, independent offices, crown corporations, universities, colleges, health authorities/affiliates and school districts – who have been carbon neutral since 2010.



## **2. Carbon Neutral Timeline**

### **January, 2017**

- The Climate Action Secretariat will forward links to the following by email to each PSO:
    - The Carbon Neutral Action Report (CNAR) Survey Form
    - Instructions and a template for the Carbon Neutral Action Report Overview
    - The Self-Certification Checklist
    - The Small Emitters Form and a status notifications for new Small Emitters (if applicable)
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### **April 28, 2017**

- PSOs must ensure that all of their consumption/activity data for the 2016 reporting year has been loaded into SMARTTool. After this deadline, any changes to 2016 inventories will be adjusted and budgeted for in the 2017 reporting year.
  - From May 1 to May 15, the Climate Action Secretariat (CAS) will conduct data quality analysis (QA/QC) on the SMARTTool data to assess whether it is complete and accurate.
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### **May 15, 2017**

- PSOs must email their completed and signed Self-Certification Checklist to the Climate Action Secretariat: [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca)
  - Each PSO will receive an Offset Payment Invoice with their final emissions numbers and the dollar value of offsets to be retired on their behalf for the 2016 reporting year.
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### **May 31, 2017**

- PSOs must email their final, signed Carbon Neutral Action Report (CNAR) Overview to the Climate Action Secretariat: [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca)
  - A separate CNAR Survey Form must be completed and submitted online.
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### **June 30, 2017**

- The Climate Action Secretariat will post the Individual reports from each PSO on the BC Government’s Carbon Neutral Government [web pages](#).
  - Payment of offset invoices must be received by the Secretariat.
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### **July 2017**

- The Climate Action Secretariat will publish a consolidated report on behalf of B.C.’s Provincial Public Sector.
- By the end of the month, the Climate Action Secretariat will notify PSOs if their 2016 reported consumption data will be verified by an accredited independent third-party.

### 2.1 Measure

In accordance with *GGRTA* and *CNGR*, each PSO is responsible for preparing a complete and accurate inventory of the greenhouse gas emissions from their operations and reporting these emissions annually. The key steps in the measurement and reporting process involve: (1) Design; (2) Capture; (3) Compile; (4) Record; (5) Report and Self-Certify; and (6) Archive. For more details, refer to “*BC PSO Emission Reporting: Quality Control and Quality Assurance Guidance*” which you will find [here](#). We’ll very briefly cover the first four steps in this section.

**DESIGN:** This is a critical step because it sets the foundation for all remaining steps. It involves defining and documenting:

- a. roles and responsibilities of organizational staff including governance and oversight;
- b. business processes including quality controls procedures;
- c. data retention and archiving
- d. your PSO’s in-scope emission sources including:
  - Stationary Sources: e.g., buildings, facilities, generators (owned or leased)
  - Mobile Sources: e.g., vehicles, off road equipment, marine vessels (owned or leased)
  - Other Sources: office paper consumption, and business travel (for core government only)

For more details about what’s in and out-of-scope, please refer to the [2016/2017 Scope Summary for B.C. Public Sector Greenhouse Gas Emissions](#).

**CAPTURE:** Involves collecting all in-scope consumption data related to your PSO’s in-scope emission sources and ensuring data completeness and accuracy.

- Stationary Sources: e.g., electricity invoices for lighting; EDX data
- Mobile Sources: e.g., vehicle fueling receipts
- Other Sources: e.g., vendor reports on packs of photocopy paper purchased

**COMPILE:** Involves aggregating captured data as necessary and reconciling data to ensure no errors are present in preparation for the Record step.

**RECORD:** Involves recording all captured and compiled data into your PSO’s SMARTLoad template and uploading it into SMARTTool. Loading data can also be completed automatically via monthly electronic data exchange (EDX) in the case of FortisBC’s natural gas and BCHydro’s electricity data. If your organization hasn’t been setup to use SMARTTool or EDX please contact us at: [carbon.neutralapps@gov.bc.ca](mailto:carbon.neutralapps@gov.bc.ca). Once your data has been loaded, SMARTTool converts it into greenhouse gas emissions and provides a range of reports for analysis, planning, reporting, etc. At this point, you should review your PSO’s emissions results to assess whether they’re reasonable (for example, compared with same quarter from the previous year).

**SMARTTool DEADLINE: April 28, 2017 for uploading your data into SMARTTool.**

For more details about the emission factors and methodology that SMARTTool uses to calculate greenhouse gas emissions, refer to the [2016/2017 Best Practices Methodology for](#)

[Quantifying Greenhouse Gas Emissions](#) developed in accordance with government policy and internationally-recognized measurement and reporting standards.

### Changes to Emissions of Previous Reporting Years

It is possible that emissions reported in previous years may need to be changed (e.g. new information becoming available; errors discovered in previously entered data). Corrections to previously reported data can be made by following the guidance provided in the SMARTTool user guides available [here](#). Or you can contact [carbon.neutralapps@gov.bc.ca](mailto:carbon.neutralapps@gov.bc.ca). Changes made to your data after the **April 28, 2017** deadline will be automatically applied to the next reporting year.

## 2.2 Reduce Emissions

Under *GGRTA*, PSOs must take steps each calendar year to plan and take action to reduce the emissions from their organization's operations.

Most public sector carbon emissions are facility-related (77 per cent). Emission reduction in provincial facilities often involves adopting clean and energy-efficient technologies and practices. These range from leading-edge equipment (biomass boilers and building automation controls/systems) to simply strengthened operations management practices.

Your plans and actions to reduce emissions must subsequently be reported in your organization's annual Carbon Neutral Action Report (CNAR). The CNARs for previous reporting years for all PSOs can be found by clicking [here](#). They provide a rich resource on options for reducing emissions from across the provincial public sector.

### Funding Emission Reduction Projects

The Carbon Neutral Capital Program (CNCP) helps PSOs finance capital investments to reduce energy costs using clean technologies, thereby lowering emissions and improving the efficiency of public service delivery.

The *Carbon Neutral Capital Program* provides annual funding to school districts, post-secondary institutions and health authorities for projects that improve their energy efficiency and reduce their greenhouse gas emissions. This program generally provides funding equal to, or greater than, the amount paid each year for offsets.

For more information about funding for your sector, please contact:

- Ministry of Health: Dragana Perisic; Director Capital Policy and Planning, [Dragana.Perisic@gov.bc.ca](mailto:Dragana.Perisic@gov.bc.ca)
- Ministry of Education: Carlo Vijandre; Planning Officer, [Carlo.Vijandre@gov.bc.ca](mailto:Carlo.Vijandre@gov.bc.ca)
- Ministry of Advanced Education: Richard Gellor, Manager Capital Asset Management; [Richard.Gellor@gov.bc.ca](mailto:Richard.Gellor@gov.bc.ca)

### 2.3 Offset

While the B.C. public sector is actively reducing its carbon footprint, it still generates GHG emissions. To reduce its emissions to net-zero, each PSO is required to enter into an agreement with the Ministry of Environment through which the Climate Action Secretariat will purchase and retire B.C.-based offsets on the PSO’s behalf. One offset represents one tonne of carbon dioxide equivalent removed from the atmosphere or one less tonne of carbon dioxide equivalent released into the atmosphere and has the same effect on the atmosphere, no matter where it occurs.

The [Greenhouse Gas Emission Control Regulation](#) (GGEER) establishes the framework and requirements for issuing offset units under the [Greenhouse Gas Industrial Reporting and Control Act](#) (GGIRCA). Emission offset projects implement their project activities in accordance to GGIRCA and GGEER. Offset units are credited to the [BC Carbon Registry](#) and used for GGRTA/CNGR compliance.

For more information, refer to the BC Government websites on [Offsetting Your Corporate Carbon Liability](#) and [Carbon Offset Projects](#). Or email the [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca).

#### Yearend PSO Offset Purchases

**On May 15, 2017**, the Climate Action Secretariat will generate an *Offset Payment Invoice* for each PSO. This invoice represents the PSO’s offset requirements for the 2016 reporting year in terms of the total emissions that require offsetting and the amount payable for these offsets. Adjustments to emissions in previous reporting years are also included.

### 2.4 Report

**REPORT:** Every year, *GGRTA and CNGR* require each PSO to prepare and make public an annual *Carbon Neutral Action Report (CNAR)* documenting their emissions and offsets along with the actions they have taken to reduce emissions as well as any plans made during the reporting year to reduce future emissions. Copies of past CNARs can be found [here](#). For CNAR instructions and a template for the Overview, refer to [Carbon Neutral Corner Guidance Documents](#).

**CNAR DEADLINE: May 31, 2017 for submission to [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca).**

**SELF CERTIFY:** As part of the process to assure the accuracy and completeness of PSO measurement and reporting, PSO management must review and validate the emissions and offsets it reports annually. It does so by completing and signing off on a Self-Certification Checklist confirming:

- the accuracy and completeness of the PSO’s data submitted to SMARTTool; and
- the adequacy of business processes for data capture, compiling, recording, reporting and archiving. Templates for self-certification procedures and records-keeping can be found at the above Guidance document link.

**SELF-CERTIFICATION DEADLINE: May 15, 2017 for submission to [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca).**

**ARCHIVE:** This step supports a PSO’s Self-Certification through documentation and record-keeping that provides evidence necessary for third party verification.

### 2.5 Verify

To assure the integrity of PSO measurement and reporting, the Climate Action Secretariat developed a verification framework that comprises two key elements:

- **Self-Certification:** (Refer to the section 4. REPORT above)
- **Third Party Review (verification):**

A third party review is conducted every year on a small sample of PSOs. Those subject to the review have their business process documentation and consumption data undergo a risk-based verification. Organizations that are selected for verification will be notified in July, 2017.

This approach strikes a balance between rigor, cost, and administrative requirements. It also provides an educational opportunity, demonstrates public accountability for emissions reporting, and ensures a high level of certainty that reports are accurate and complete.

A consistent finding of past verifications is the need for PSOs to formally document their business processes for GHG data capture, compilation, recording, reporting and archiving. “[BC PSO Emission Reporting: Quality Control and Quality Assurance Guidance](#)” is an excellent resource for this purpose. The value of robust documentation is especially high when PSOs have to manage staff turnover or undergo verification.

Some of the key things that third party verifiers will be looking for include:

- Clearly defined and documented roles and responsibilities for the personnel involved in the PSO’s GHG reporting process including adequate oversight and governance (this reduces the risk that personnel tasked with fulfilling these roles may not be aware of the full scope of their accountabilities and therefore be unable to fulfill them). A template for this can be found [here](#).
- Procedures and quality controls for the capture, compilation, recording, reporting and archiving of data. A high-quality, well-designed data management process will save time at the reporting and verification stage, even though they may require additional upfront investment.
- A complete and accurate inventory of your organization’s emission sources/activities. Refer to the [2016/2017 Scope Summary for B.C. Public Sector Greenhouse Gas Emissions](#) for guidance to help determine what is “in scope” and “out of scope”.
- A complete, consistent and accurate consumption dataset for the reporting year.

## 3. Resources

BC Government [Carbon Neutral Corner](#) is an online platform for the Public Sector to access guidance documents, templates, important timelines, relevant information, upcoming webinars, and other valuable resources.

**Where Green Ideas Work:** This [website](#) is where you will find [SMARTTool](#) as well as announcements focused on emissions measurement. A BCEID is required. If you do not have a BCEID, speak to your PSO’s BCEID Administrator or contact [carbon.neutralapps@gov.bc.ca](mailto:carbon.neutralapps@gov.bc.ca) about how to obtain a BCEID.

## **BECOMING CARBON NEUTRAL – B.C.'S PROVINCIAL PUBLIC SECTOR – 2016 REPORTING YEAR**

**The Carbon Neutral Corner [Newsletter](#)**, CNG webinars and direct emails to primary PSO Contacts are the main tools we use to communicate updates and reporting requirements. Please notify CAS of any staff changes related to the CNG program as soon as possible to ensure information is appropriately communicated to your organization.

**General Mailbox:** For questions about Carbon Neutral Government policy, reporting requirements, methodology, etc., please contact us at: [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca)

**SMARTTool Mailbox:** For questions related to the use of SMARTTool or EDX, please contact us at: [carbon.neutralapps@gov.bc.ca](mailto:carbon.neutralapps@gov.bc.ca)

