

2019 Climate Action Revenue Incentive Program (CARIP) Survey

May 26, 2020

2019 Climate Action Revenue Incentive Program (CARIP) Survey Overview

The 2019 CARIP survey highlights and celebrates local government climate action in British Columbia.

Local governments are required to submit the 2019 CARIP/ Carbon Neutral Progress Survey by June 1, 2020.

Section 1 – Local Government Information

Name of Local Government:

- White Rock, The Corporation of the City of

Name of Regional District:

- Metro Vancouver (Regional District)

Does your region have a Regional Growth Strategy (RGS):

- Yes

Population:

- 10,000 to 49,999

Submitted by:

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Section 2 - Narrative Focus

Local government signatories to the B.C. Climate Action Charter have committed to taking climate action by:

Working towards achieving corporate carbon neutrality;
Measuring and reporting on their community-wide GHG emissions; and
Creating complete, compact, energy-efficient communities.

A key part of the 2019 CARIP survey is to highlight and celebrate successful climate actions undertaken by local governments in British Columbia.

In 2019, what actions has your local government taken to support the creation of compact, complete, and energy efficient communities?

Began review of Official Community Plan that includes policies for guiding land use and growth and achieving social, economic, and environmental sustainability.

2019 CORPORATE CLIMATE ACTION:

Corporate climate actions refer to actions that reduce the 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.

In 2019, when it comes to corporate climate action, did your local government undertake any of the following (PLEASE SELECT ALL THAT APPLY):

- Building and Lighting Actions
- Energy Generation Actions
- Greenspace Actions
- Planning Actions
- Solid Waste Actions
- Transportation Actions
- Water and Wastewater Actions

When it comes to corporate Building and Lighting Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- New or upgraded energy-efficient lighting systems
- New or upgraded energy-efficient heating systems
- New or upgraded building envelope initiatives
- Upgrades to amenities in recreation facilities
- Studies related to building and/or lighting energy efficiency

When it comes to corporate Energy Generation Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Solar power projects
- Heat recovery or heat reclamation projects
- Biomass or bio-gas projects
- Geo-exchange or geothermal projects
- Studies related to energy generation

When it comes to corporate Greenspace Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Tree planting
- Greenspace acquisition
- New or upgraded amenities in parks
- Invasive species management
- Plans or strategies related to greenspace

When it comes to corporate Planning Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Energy/Emissions Management Plan (New or Updated)
- Asset Management Plan (New or Updated)
- Corporate Climate Action Plan (New or Updated)
- Strategic Plan (New or Updated)

When it comes to corporate Solid Waste Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Introduction, expansion or improvement of recycling initiatives at corporate facilities
- Introduction, expansion or improvement of composting initiatives at corporate facilities
- Communication or education for staff related to corporate solid waste initiatives
- Studies or research related to corporate solid waste initiatives
- Plans or strategies related to corporate solid waste initiatives

When it comes to corporate Transportation Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Fleet replacement or upgrades
- New or improved electric vehicle initiatives
- New or improved active transportation infrastructure for staff
- Communication or outreach for staff related to corporate transportation initiatives
- New or improved public transportation initiatives for staff

When it comes to corporate Water and Wastewater Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- New or improved water or wastewater infrastructure
- Studies or research related to water conservation
- Plans or strategies related to water or wastewater
- Water reduction initiative(s)

As mentioned, a key part of the 2019 CARIP survey is to highlight and celebrate successful climate actions undertaken by local governments in British Columbia. This question provides local governments the opportunity to demonstrate leadership and innovative approaches to reduce corporate GHG emissions.

When it comes to the corporate climate action, please highlight up to three significant actions focused on reducing GHG emissions that your local government undertook in 2019:

Addition of a section on climate change implications added to staff corporate reports presented to council

2019 COMMUNITY-WIDE CLIMATE ACTION:

Community-wide actions refer to actions that reduce GHG emissions across the community (i.e. actions not related to “traditional services” in corporate operations).

When it comes to community-wide climate action in 2019, did your local government undertake any of the following (PLEASE SELECT ALL THAT APPLY):

- Building and Lighting Actions
- Energy Generation Actions
- Greenspace Actions
- Planning Actions
- Solid Waste Actions
- Transportation Actions
- Water and Wastewater Actions
- Other Climate Actions (PLEASE SPECIFY)

Please specify 'Other Climate Actions'

To provide easy access to real-time information, the City deployed an air quality sensor at Memorial Park

When it comes to community-wide Energy Generation Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Solar power projects
- Heat recovery or heat reclamation projects
- Landfill gas capture/utilization projects
- Micro-hydro projects
- Studies or research related to energy generation

When it comes to community-wide Greenspace Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

- Tree planting
- Greenspace restoration or maintenance
- Greenspace acquisition

Invasive species management

Plans or strategies related to greenspace

When it comes to community-wide Solid Waste Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

Introduction, expansion or improvement of recycling initiatives

Introduction, expansion or improvement of composting initiatives

Community clean-up initiatives

General waste reduction initiative (including landfill diversion strategies)

Outreach, education or communication related to solid waste

When it comes to community-wide Transportation Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

New or improved active transportation infrastructure

New or improved public transportation initiatives

New or improved electric vehicle initiatives

Outreach, education or communication related to transportation

Plans or strategies related to transportation

When it comes to community-wide Water and Wastewater Actions, did your local government undertake any of the following in 2019 (PLEASE SELECT ALL THAT APPLY):

Water restrictions

Incentives/rebate programs related to water or wastewater

Outreach, education or communication related to water or wastewater

Studies or research related to water or wastewater

Plans or strategies related to water or wastewater

2019 CLIMATE PREPAREDNESS AND ADAPTATION ACTION:

This section of the CARIP survey is designed to collect information related to the types of climate impacts local governments are experiencing and how they are being addressed.

Please identify the climate impacts that are most relevant to your local government (PLEASE SELECT ALL THAT APPLY):

- Increased temperatures increasing wildfire activity
- Extreme weather events contributing to urban and overland flooding
- Changes to temperature and precipitation causing seasonal drought
- Warmer winter temperatures reducing snowpack
- Sea level rise and storms causing coastal flooding and/or erosion

In 2019, did your local government take any of the following actions in an effort to consider or address the impacts of climate change? (PLEASE SELECT ALL THAT APPLY)

- Emergency response planning
- Asset management
- Infrastructure upgrades
- Public education and awareness
- Strategic and financial planning
- Risk and vulnerability assessments
- Risk reduction strategies
- Official Community Plan policy changes
- Other (PLEASE SPECIFY)
- Don't know

In 2019, did your local government partnered with any of the following organizations to prepare for, and adapt to, a changing climate? (PLEASE SELECT ALL THAT APPLY)

- Adaptation to Climate Change Team (SFU)
- Columbia Basin Trust
- Community Emergency Preparedness Fund (UBCM)

- Federation of Canadian Municipalities
- Fraser Basin Council
- Pacific Institute for Climate Solutions (UVIC)
- Other (PLEASE SPECIFY)

Don't know

As mentioned, a key part of the 2019 CARIP survey is to highlight and celebrate successful climate actions undertaken by local governments in British Columbia. This question provides local governments the opportunity to demonstrate leadership and innovative approaches to adapting to a changing climate.

When it comes to climate preparedness and adaptation actions, please highlight up to three significant actions/initiatives that your local government undertook in 2019:

Shoreline protection works to account for storm surge and sea level rise

Section 3: 2019 Carbon Neutral Reporting

Local governments are required to report on their progress in achieving their corporate carbon neutral goal under the B.C. Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee has established a common approach to determining corporate carbon neutrality for the purposes of the Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for GHG emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual Climate Action Revenue Incentive Program (CARIP) reports.

2019 CARBON EMISSIONS

Did your local government measure corporate GHG emissions for 2019?

Yes

If your local government measured 2019 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent (tCO₂e)) from:

Service Delivery Type	2019 Corporate GHG Emissions
Services Delivered Directly by your Local Government	709
Contracted Services	443

TOTAL A - CORPORATE GHG EMISSIONS (DIRECT + CONTRACTED) FOR 2019:

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1152

2019 CARBON REDUCTIONS

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2019 by one or a combination of the following actions:

Undertake Green Communities Committee-supported Option 1 Project(s)

Undertake Green Communities Committee-supported Option 2 Project(s)

Purchase carbon offsets from a credible offset provider

If applicable, please report the 2019 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from any of the following Option 1 GHG Reduction Projects:

Option 1 GHG Reduction Projects	2019 GHG Emissions Reductions
1A Energy Efficiency Retrofits	
1B Solar Thermal	
1C Household Organic Waste	285
1D Low Emission Vehicles	
1E Avoided Forest Conversion	
1F Trenchless Technology	50

TOTAL B - REDUCTIONS FROM ALL OPTION 1 PROJECTS FOR 2019:

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335

TOTAL REDUCTIONS AND OFFSETS FOR 2019 (Total B+C+D):

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335

Corporate GHG Emissions Balance for 2019

Your local government's corporate GHG emissions balance is the difference between total corporate offsetable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through Green Communities Committee Option 1 and Option 2 projects and/or the purchase of offsets.

CORPORATE GHG EMISSIONS BALANCE FOR 2019 = (Total A – (B+C+D))

CORPORATE GHG EMISSIONS BALANCE FOR 2019 (Total A – (B+C+D))

817

If your corporate GHG emissions balance is negative or zero, your local government is carbon neutral. CONGRATULATIONS!

GREEN COMMUNITIES COMMITTEE CLIMATE ACTION RECOGNITION PROGRAM:

The joint Provincial-UBCM Green Communities Committee is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the Green Communities Committee with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter (Charter) signatory.

Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

Level 1 – Demonstrating Progress on Charter Commitments: For local governments who demonstrate progress on fulfilling one or more of their Charter commitments.

Level 2 – Measuring GHG Emissions: For local governments that achieve Level 1, who measure their corporate GHG emissions for the reporting year and demonstrate that they are familiar with their community’s energy and emissions inventory (i.e. CEEI).

Level 3 – Accelerating Progress on Charter Commitments: For those local governments who have achieved Level 1 and 2 and demonstrate significant action (corporately or community-wide) in reducing GHG emissions in the reporting year (e.g. through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

Level 4 - Achievement of Carbon Neutrality: For local governments who achieve corporate carbon neutrality in the reporting year.

Based on your local government's 2018 CARIP Climate Action/Carbon Neutral Progress Survey, please check the Green Communities Committee Climate Action Recognition Program level that best applies:

- Level 1 – Demonstrating Progress on Charter Commitments
- Level 2 – Measuring GHG Emissions
- Level 3 – Accelerating Progress on Charter Commitments
- Level 4 - Achievement of Carbon Neutrality
- Don't know

Does your local government set aside funds in a climate reserve fund or similar?

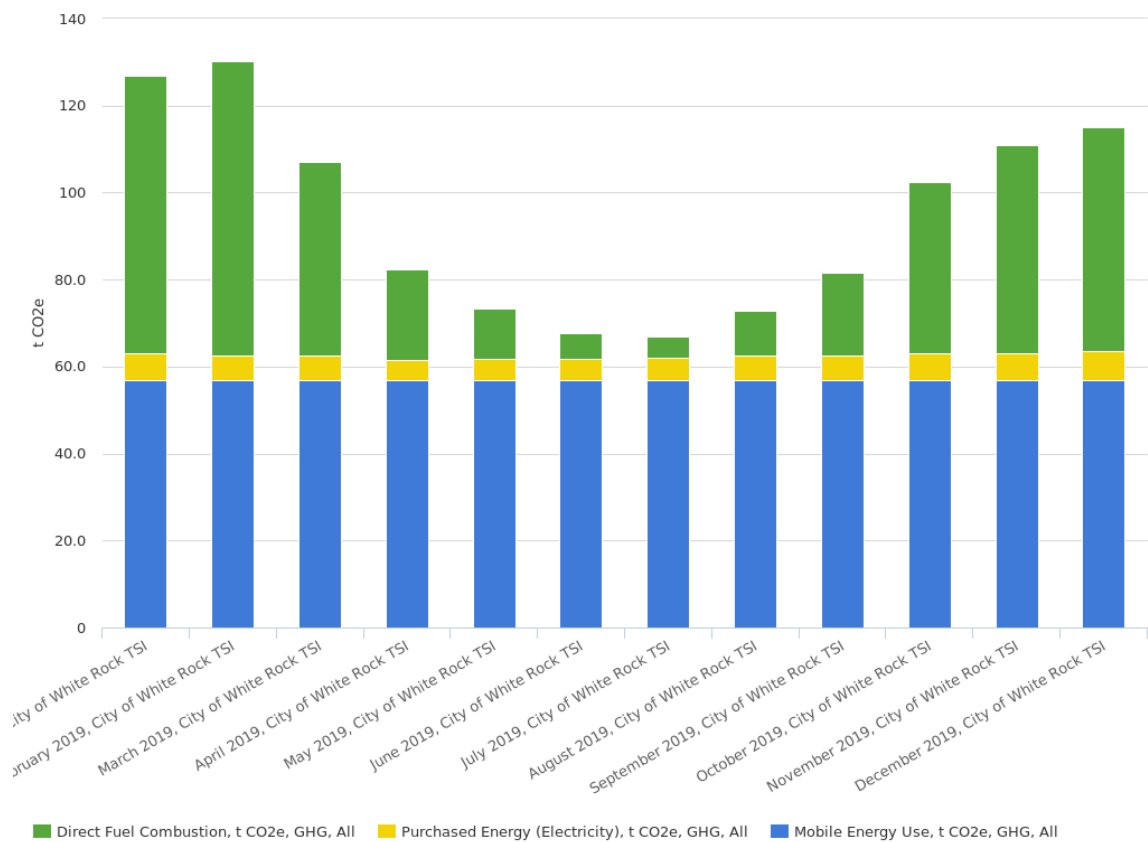
- Yes



2019 BC Traditional Services GHG Inventory

<u>Reporting Entity:</u>	City of White Rock
<u>Reporting Year:</u>	Calendar Year 2019
<u>Inventory Scope:</u>	BC Traditional Services Inventory "TSI"
<u>Quantification Methodology:</u>	2019 B.C. Best Practices Methodology for Quantification GHG Emissions, Local Governments & Public Sector Organizations
<u>System Support:</u>	SoFi GHG Reporting by GHG Accounting Services
<u>Data collection:</u>	City of White Rock
<u>Data Entry:</u>	Data Upload

Total TSI GHG Inventory: 1,152 t CO₂e



Total Energy Consumption by Energy Type for Traditional Services Inventory:

	City of White Rock TSI
Natural Gas Stationary [GJ]	7,773
Electricity [kWh]	6,341,211
Gasoline [l]	146,990
Diesel [l]	132,169
Propane [l]	210

Scope 1:

	City of White Rock TSI				
	GJ, Energy	t CH4	t N2O	t CO2	t CO2e, GHG, Scope 1
Direct Fuel Combustion	7,773	0.007773	0.006995	385	388
Mobile Energy Use	9,995	0.059314	0.101276	656	688
Total	17,902	0.067555	0.109662	1,050	1,085

Scope 2:

	City of White Rock TSI	
	kWh	t CO2e, GHG, Scope 2
Purchased Energy (Electricity)	6,341,211	67

Biogenic GHG Emissions:

	City of White Rock TSI		
	t Bio CH4	t Bio CO2	t Bio CO2e, GHG, All
Direct Fuel Combustion		0.345058	0.345058
Mobile Energy Use	0.226047	23.8	23.8
Total	0.226047	24.2	24.2

Totals by Delivery:

	City of White Rock	City of White Rock	Total
	Delivered Directly	Contracted Services	
	Energy Inventory	Energy Inventory	
	t CO2e, GHG, All	t CO2e, GHG, All	
2019	709	443	1,152

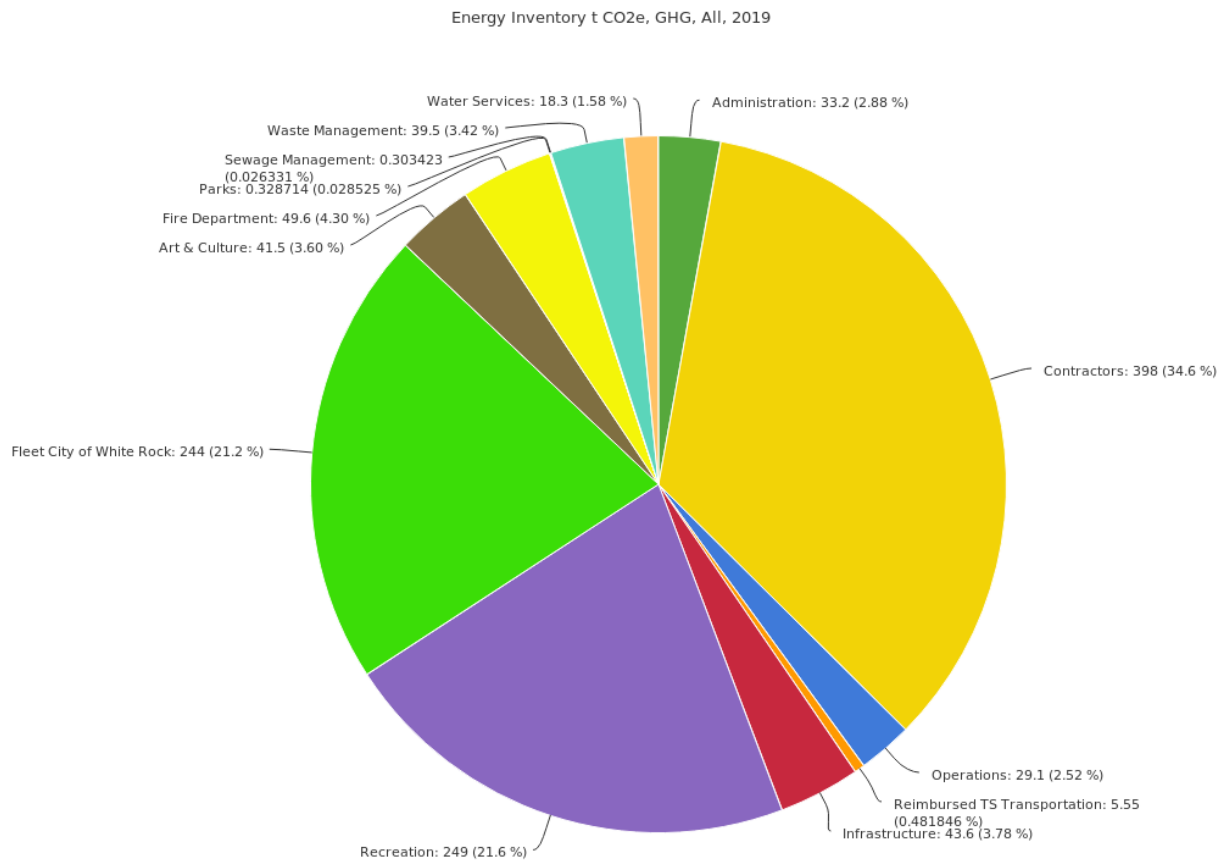
Summary:

	Energy Inventory	Office Paper	Total
	t CO2e, GHG, All	t CO2e, GHG, All	
	City of White Rock TSI		
2019	1,152		1,152

Offset Summary:

	City of White Rock 2019
	t CO2e
Offsets Required	<u>1,152</u>
Option 1D: Household Organic Waste Composting	285
Offsets Acquired	
Offsets from Previous Years	50.2
Carbon Neutrality Status	817

Overview by Service Areas:



Top GHG Emitter

	t CO2e, GHG	%
Total City of White Rock TSI	1,152	100
Contractors	398	34.6
Recreation	249	21.6
Fleet	244	21.2