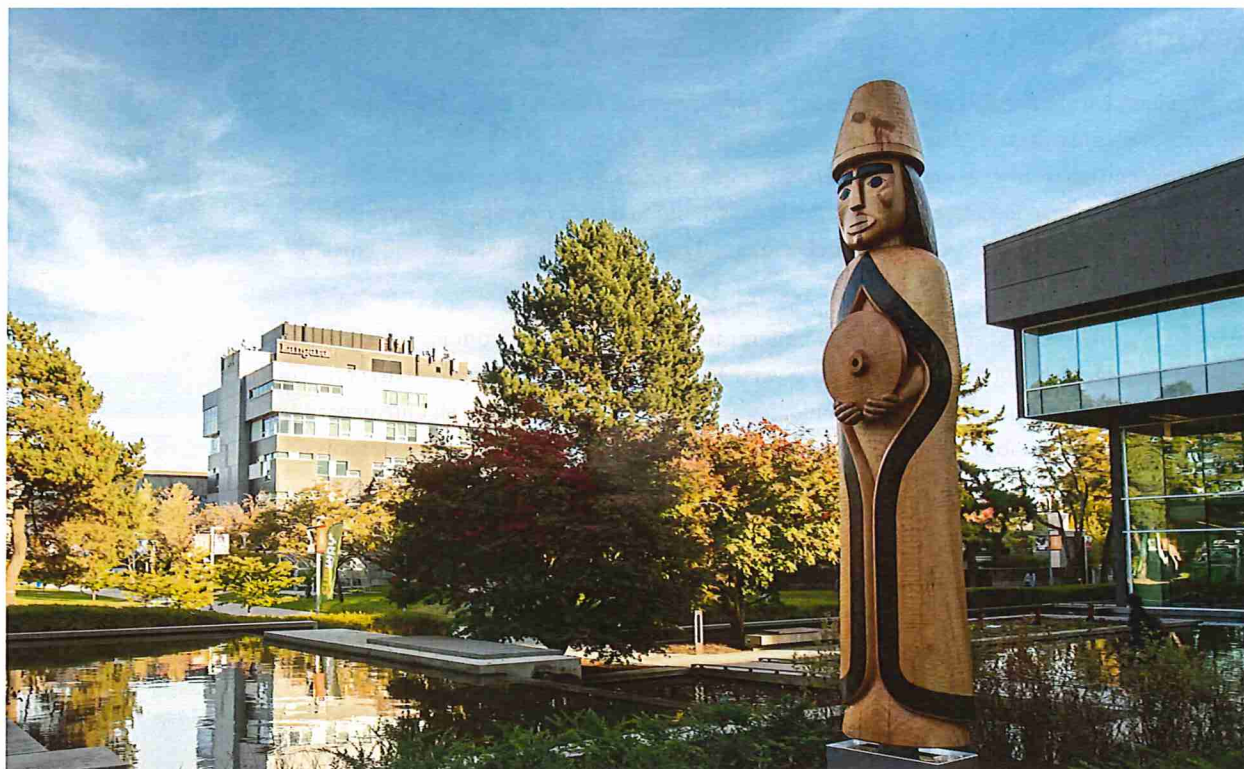




2019 Carbon Neutral Action Report

LANGARA COLLEGE

May 2020

snəwəyət leləm.

THE COLLEGE OF HIGHER LEARNING.

Langara.

THE COLLEGE OF HIGHER LEARNING.

Introduction

At Langara College, we are deeply committed to being part of a sustainable society. We understand that the world's resources are finite and need to be used conservatively and wisely. We know that our choices, both big and small, impact our world and future generations. As an educational institution, we have a responsibility to lead initiatives that positively contribute to our community. Our goal is to foster and provide leadership to create more environmentally sound, socially just, and economically vibrant communities.

Our mission is to provide accessible, high-quality undergraduate, career, and continuing educational programs and services that meet the needs of our diverse learners and the communities we serve. This is guided by Langara's Strategic Plan, which complements the Academic Plan. While all outcomes in the plan are important, the thematic priority to support our mission for academic excellence is a focus on organizational and financial sustainability. We are currently undergoing a process to renew our Strategic Plan.

As part of the College's commitment to reducing GHG emissions, an Environmental Responsibility Policy was established in June 2001. The purpose of the board governance policy is to provide direction to the College regarding the creation of learning and working environments characterized by social responsibility, the Board is committed to:

- protecting and enhancing the environment for future generations, and
- using and managing its own physical environment more sustainably.

In 2017, Langara College also renewed its Sustainability policy to affirm its ongoing commitment to and responsibility for fostering an institutional culture characterized by leadership in environmental, social and financial sustainability. The College also established a sustainability committee to advise senior leadership and pursue opportunities for all members of the College community to make choices that promote sustainability in the teaching, learning, researching and working environments in alignment with strategic directions.

Langara College has been working at reducing greenhouse gases (GHG) and increasing sustainability for many years and has been actively monitoring and managing energy and GHGs of its facilities for almost 20 years. Since 2010, along with all BC public sector organizations (PSOs), as mandated under the Greenhouse Gas Reduction Targets Act, Langara has been reporting their annual GHG emissions and investing in offsets to achieve net-zero emissions.

The College is proud of its commitment and successes related to our GHG reduction effort. We will continue to increase environmental, financial, and social sustainability at Langara, in our city, and in our world.

2019 Carbon Neutral Action Report

DECLARATION STATEMENT

This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 2019, summarizes our emissions profile¹, the total offsets to reach net-zero emissions, the actions we have taken in 2019 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2020 and beyond.

By June 30, 2020 Langara's latest Carbon Neutral Action Report will be posted to our website at langara.ca/about-langara/sustainability/initiatives/carbon-neutral

¹ **Directive issued March 31, 2020:** *Under my authority as the Director for the purposes of the Act, and under the authority delegated to me in Section 6 of the Carbon Neutral Government Regulation, I hereby direct that all ministries and Public Sector Organizations covered by the Carbon Neutral Government requirement shall use their 2018 GHG emissions as a temporary estimate for their actual 2019 GHG emissions, for the purposes of the 2019 Carbon Neutral Action Reports and 2019 Carbon Neutral Government reporting required under the Climate Change Accountability Act.*

Neil Dobson, Executive Director, Clean BC Implementation Climate Action Secretariat

Overview

Langara has been able to reduce our energy usage and emissions on campus while we grow. Since 2009/10, the campus area has increased by 33%. During this same period, our energy usage on and emissions per sqft on campus have decreased by 25% and 45% respectively. As the campus grows, we continue to incorporate energy efficiency in our designs and ongoing upgrades.

Our new Sciences and Technology building received LEED Gold certification, making this the fourth LEED Gold building on Campus. The construction of this building also included phase one of a renewed central heating plant on campus. Langara is also upgrading many end-of-life systems to more efficient alternatives including upgrading lighting to LED throughout campus.

Langara College participated in and implemented several sustainability projects and initiatives in 2019:

- Hosted the 8th annual Public Sector Climate Leadership Symposium (Nov 26-27, 2019).
- Continued to standardize our recycling and composting sorting stations to be consistent with the City of Vancouver.
- Installed additional water fill stations around the campus to help eliminate the need for single-use water bottles on campus with a goal to have one on every floor of every building. We now have 18 water-fill stations across campus, and have collectively saved over 1.7million plastic bottles to date.
- Continued work with the community to move toward a Zero waste events certification process.
- Installed six additional EV charging stations as well as infrastructure for future installations.
- Conducted a college-wide transportation survey (conducted every two years) with over 3,400 responses.
- Installed additional 18 solar panels across the campus (we now have 38 solar panels).
- Langara's Sustainability Committee continues to meet and discuss campus needs. Working with the Academic Plan Action Group, it has a goal to reach Bronze level for the ASSHE STARS (Sustainability Tracking Assessment Rating System).
- Highlighted our new sustainability tour and announced the winner of the "Adopt-a-Plot Gardening contest" launched at our Beyond 49 celebration on June 15, 2019.
 - Adopt-a-plot: 10 plots where community members worked together to beautify the Langara campus with perennial plants
 - the campus sustainability tour (langara.ca/sustainability)
- Secured funding with KPMG Foundation to hire a student to work on sustainability projects on campus.
- Created a Communications Plan which includes monthly sustainability news to over 1,600 employees in our employee newsletter *The Langara Post*.

2019 Carbon Neutral Action Report

A few highlights are included at the end of this report.

We continue to look for opportunities to make our campus more sustainable for future generations. Over the next few years, the campus will be expanding our renewed central heating plant to other buildings on campus (creating a campus-wide district heating system), including exploring ways to further reduce our heating plant emission. We plan to explore geothermal and heat pump opportunities as a first step. We are currently undergoing an integrated planning process which will inform our priorities for the next 3-5 years.

Emissions Summary

Directive issued March 31, 2020

Under my authority as the Director for the purposes of the Act, and under the authority delegated to me in Section 6 of the Carbon Neutral Government Regulation, I hereby direct that all ministries and Public Sector Organizations covered by the Carbon Neutral Government requirement shall use their 2018 GHG emissions as a temporary estimate for their actual 2019 GHG emissions, for the purposes of the 2019 Carbon Neutral Action Reports and 2019 Carbon Neutral Government reporting required under the Climate Change Accountability Act.

Neil Dobson, Executive Director, Clean BC Implementation Climate Action Secretariat

The total emission offsets applied to become carbon neutral in 2018 was 1,424 tCO₂e. 2018 is used as an estimate for 2019 reporting as per directive from Clean BC Implementation Climate Action Secretariat. As indicated in the chart below, 91% (82% + 9%) of Langara's tracked emissions are from building energy use.

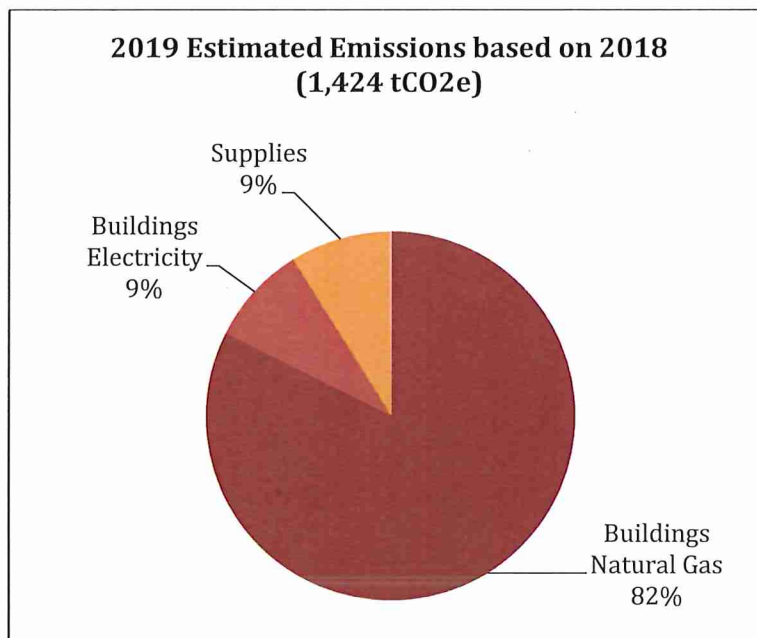


Figure 1: 2019 Estimated Emissions Breakdown based on 2018 Emissions

2019 Carbon Neutral Action Report

Langara College's GHG emissions for the mandatory reporting categories are summarized in the table below. Comparisons to 2018 calendar year and 2007 (the Ministry base-year for GHG target reduction) are included. The Buildings and Paper emissions are also charted on the next page.

	2018 GHG Emissions (tCO ₂ e)	2018 Results Compared to 2017	2018 Results Compared to 2007 Baseline
Buildings – Natural Gas	1,174	12% Decrease	36.5% Decrease
Buildings – Electricity	124	0% No change	27.7% Decrease
Supplies – Paper	124	7% Decrease	Not Available
Fleet	1.7		
Total	1,423	10% Decrease	35.7% Decrease

Table 1: Emissions Breakdown for 2018 Compared to Previous Year and Baseline (2007)

As required by the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, the results shown above are based on absolute emissions and have not been corrected for the impact of weather conditions.

The chart below (Figure 2) shows the trend in GHG emissions for our Buildings compared to the base period year of 2007 and the previous five reporting years. As you can see in the bar graph and summarized in the previous Table 1, the emissions from buildings (natural gas and electricity combined) have increased from 2016 to 2017. This is expected as our new Science & Technology Building opened in September 2016, increasing the campus area by 20%; 2017 is the first full year of occupied operation for this new building.

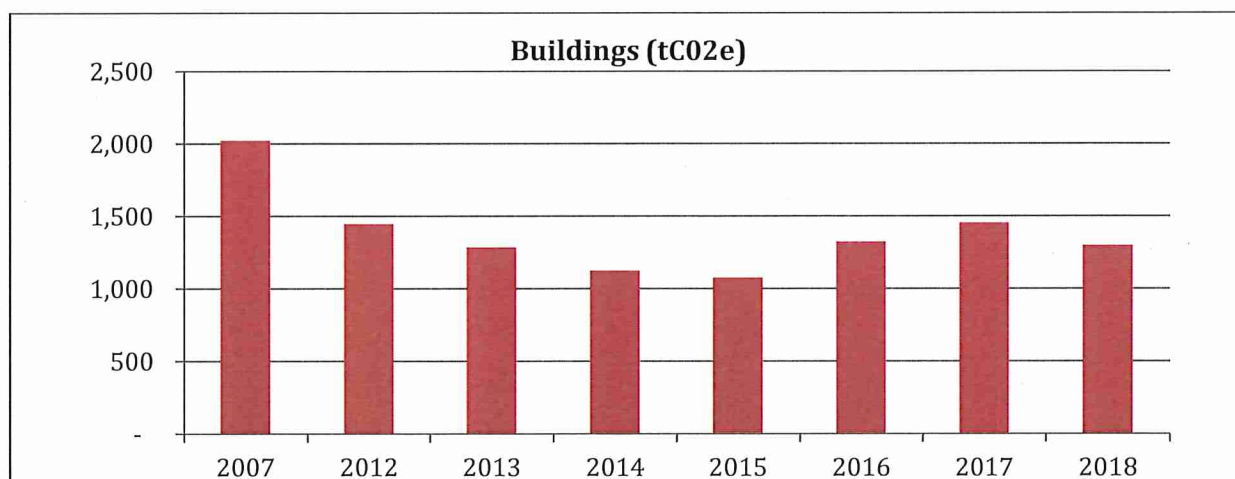


Figure 2: Building Emissions Trend (tCO₂e) – Electricity & Natural Gas Emissions Combined

2019 Carbon Neutral Action Report

Figure 3 below shows the trend in emissions for paper purchases on campus. As summarized in Table 1, paper consumption from 2016 to 2017 has decreased by 22%. Langara is happy to note that we have completed the installation of our new fleet of multi-function devices and printers across campus. With the addition of these new units we now have an accurate tool to track the consumption of paper and related resources. This information gathered will help us make better decisions and develop targeted reduction campaigns in an effort to reduce emissions and utilize our resources efficiently.

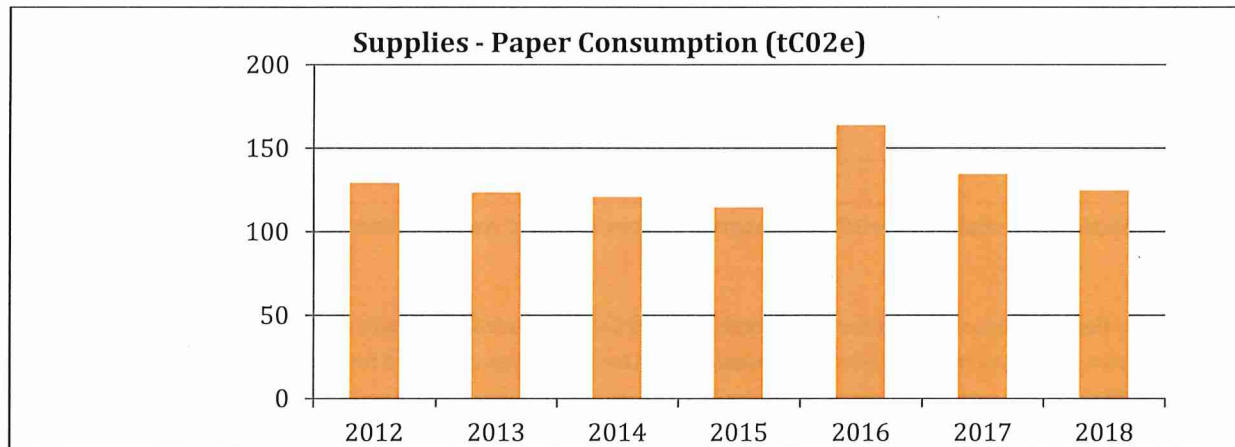


Figure 3: Paper Supplies Emissions Trend (tCO2e)

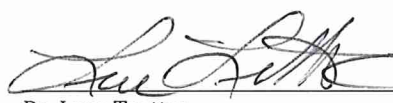
Emissions and Offset Summary Table

Langara College GHG Emissions ² and Offsets for 2018 (tCO ₂ e ³)	
GHG's created in Calendar Year 2018 – Estimate for 2019	
Total Emissions (tCO ₂ e)	1,424
Total Offsets (tCO ₂ e)	1,424
Adjustments to GHG's Reported in Prior Years	
Total Emissions (tCO ₂ e)	0
Total Offsets (tCO ₂ e)	0
Total Emissions for Offset for the 2017 Reporting Year	
Total Offsets (tCO ₂ e)	1,424

RETIREMENT OF OFFSETS

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Langara College (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2019 calendar year – estimated based on 2018 together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the Organization's behalf, the Organization will pay the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

EXECUTIVE SIGN-OFF



Dr. Lane Trotter

President & CEO

May 28/20

Date

² Emissions are calculated as per Ministry of Environment, 2014 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions (Victoria, BC: November 2014).

³ Tonnes of Carbon Dioxide Equivalent as a standard measurement for GHGs by multiplying each gas' emissions by its global warming potential (GWP).

Highlights

CAMPUS SUSTAINABILITY TOUR

DID YOU KNOW?

-  Every dollar that is recycled from a can or bottle on campus goes towards bursaries for our students.
-  Langara has had an on-site worm compost for over 20 years.
-  There are currently 38 solar panels providing renewable energy on campus.
-  We have four programs on the topic of environment and sustainability (Environmental Studies, Biology, Ecology, and Applied Urban & Rural Planning).
-  We have reduced our overall absolute GHG emissions from our buildings by 30% compared to our 2007 baseline.
-  62% of Langara's regularly commute to Langara via alternative transportation such as transit, cycling, or walking.*
-  Langara has been part of Bike to Work week since 2007.
-  Langara has 48 water fill stations on campus to promote reusing your own water bottle. We have saved over 1.1 million plastic bottles to date!

*2019 transportation survey

SUSTAINABILITY HIGHLIGHTS

- 1998** Langara joins the Energy Innovator Program.
- 2001** First strategic energy management plan is created.
- 2002** An Energy Management Coordinator is appointed. The College begins a project to revitalize the wetlands on campus.
- 2007** The Library & Classroom building is the first LEED® Gold® certified building on campus to open, and features energy-efficient, geoswitch heating and cooling technology.
- 2009** The BC Hydro Energy Manager Program is initiated.
- 2010** Langara is approved for the BC Hydro Continuous Optimization Program. Adopts the Association of Canadian Community College's Pan-Canadian Protocol for Sustainability.
- 2011** Community Garden is established on campus.
- 2012** The first electric vehicle charging stations are installed.
- With over 20 years of thinking green, IT continues paving the way forward by introducing the energy-efficient Citrix Thin Client model to the campus, which reduces energy output from 300W to less than 10W per device.
- 2013** Dedicated recycling depot is constructed.
- 2014** Apiary is established on campus.
- 2015** New LEED® Gold Science & Technology Building opened. Langara announces its first stand-alone sustainability policy.
- 2016** First solar panels are installed.

®LEED® Leadership in Energy and Efficient Design

Stepping towards sustainability.

LANGARA SUSTAINABILITY TOUR



snaweyot lelam. Langara

Stepping towards sustainability.

LANGARA SUSTAINABILITY TOUR

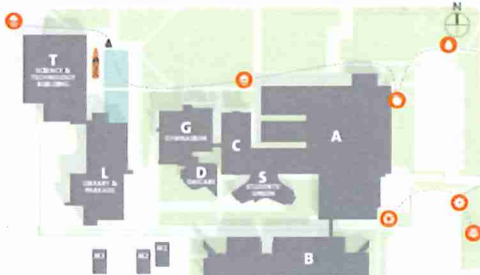
What are some of the ways that Langara is eco-conscious? Take our self-guided tour to learn about the various ways Langara leads sustainability initiatives, from recycling to rain gardens.

ABOUT THE TOUR

15min long (approx 900 steps)
10-15 min duration

This tour is accessible via paved sidewalks, with exception of the community garden and apiary which are accessed by stairs and located on natural mulch.

Restrooms are available in all buildings.





T BUILDING AUDIO TOUR

Ready for more? Take an audio tour of Langara's award-winning sustainable T building. The audio tour highlights the various green features of the state-of-the-art facilities and is designed to be listened to while perusing the building.

To access the tour, visit www.buildingsustainability.com and search for "Langara".

Learn more:
www.langara.ca/sustainability

Brochure (PDF and limited recycled paper versions available) providing route and sustainability highlights.

2019 Carbon Neutral Action Report

ADOPT A PLOT COMPETITION

Family members spend time together outdoors, learning about nature, and beautifying the campus.



WATERFILL STATIONS



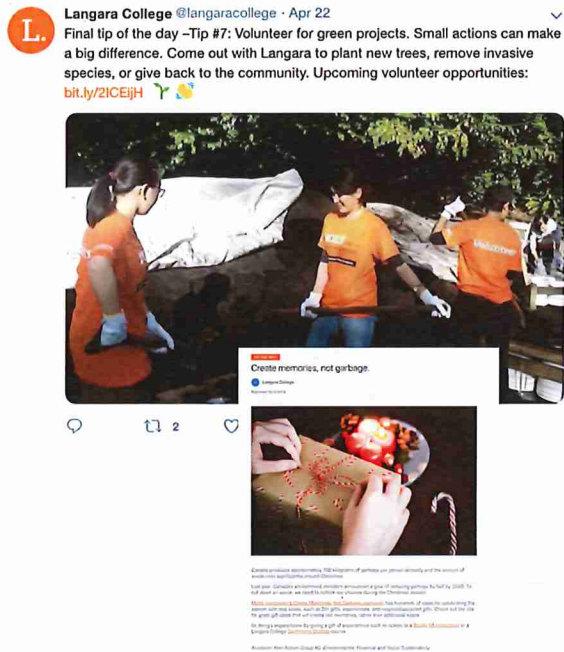
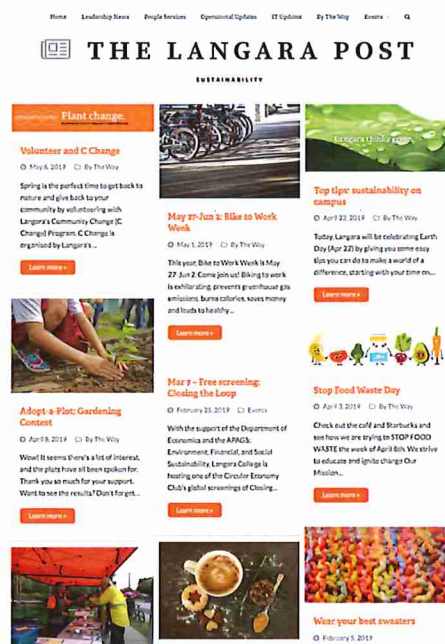
2019 Carbon Neutral Action Report

ELECTRIC CHARGING STATIONS



Electric vehicle station in Library underground parkade

COMMUNICATION AND AWARENESS



We published sustainability news across multiple platforms including Facebook, Twitter, Instagram, LinkedIn, our employee newsletter, and website.

Confirmation number: 00C6A884

Submitted date: 2020-07-08 13:57:39 Pacific Daylight Time

Carbon Neutral Action Report Survey - 2019

Public sector organizations (PSOs) are required to complete this survey, in addition to a Carbon Neutral Action Report (CNAR) as mandated by BC's [Climate Change Accountability Act](#) and the [Carbon Neutral Government Regulation](#).

Due to the COVID-19 pandemic, the following [Directive](#) was issued on March 31, 2020. Certain deadlines were also extended for the 2019 reporting year (see below).

March 31, 2020 Directive:

Under my authority as the Director for the purposes of the Act, and under the authority delegated to me in Section 6 of the Carbon Neutral Government Regulation, I hereby direct that all ministries and Public Sector Organizations covered by the Carbon Neutral Government requirement shall use their 2018 GHG emissions as a temporary estimate for their actual 2019 GHG emissions, for the purposes of the 2019 Carbon Neutral Action Reports and 2019 Carbon Neutral Government reporting required under the Climate Change Accountability Act.

Neil Dobson, Executive Director, Clean BC Implementation
Climate Action Secretariat

Although 2018 emissions data will be used as a placeholder for 2019, **all other (qualitative) components of the CNAR and CNAR Survey are to be completed with information from 2019 (e.g., actions taken or planned to reduce emissions)**. The only change to the survey is that the deadline was extended by one month to June 30, 2020.

This survey is divided into two parts:

Part 1 - Will be made public on the Climate Action Secretariat (CAS) [website](#) after June 30, 2020; however, it will not be appended directly to each individual PSO CNAR as was done in previous years. This section collects details about actions taken or planned to reduce emissions and is intended to supplement the legislative requirements in your CNAR.

Part 2 - Will NOT be made public. Information you provide in this section is important and will be used internally to help CAS staff with planning for emissions reduction and climate change adaptation initiatives. Although not required, PSOs are highly encouraged to complete Part 2.

Note: Survey progress can be saved at any time by clicking the "Save and continue later" button at the bottom of each page. A new window will open and you will be asked to provide your name and email. An email will be sent to you from Carbon.Neutral@gov.bc.ca with the subject line: "Questionnaire Link", which will include a hyperlink for the "Project: Carbon Neutral Action Report Survey – Broader Public Sector 2019". You can then continue responding at another time or email the hyperlink to a colleague to complete remaining section(s).

May 29, 2020	The final, signed version of the CNAR (or Small Emitters Form) must be submitted by email to: Carbon.Neutral@gov.bc.ca
June 30, 2020*	- Ministry of Environment and Climate Change Strategy must post a final CNAR for each organization on the BC Government's CNG website and each PSO is encouraged to post the report on their website. - The CNAR Survey (optional for Small Emitters) must be completed and submitted online. *Deadline extended from May 29, 2020. <u>All offset invoice payments must be submitted to CAS.</u>
Sept 30, 2020*	Clean Government Reporting Tool (CGRT) Data Entry must be completed for the 2019 reporting year.

	*Deadline extended from April 30, 2020.
Oct 15, 2020*	• Self-Certification checklist must be completed, signed and submitted by email to: Carbon.Neutral@gov.bc.ca. *Deadline extended from May 15, 2020.

*See the [Carbon Neutral Government – Program Requirements website](#) for more information on program requirements, timelines and templates.

PART 1 - Included as part of your public CNAR report.

Reminder that Part 1 will be made public on the CAS [website](#).

Contact Name:	<i>Patricia Baker</i>
Contact Email:	<i>patriciabaker@langara.ca</i>
Organization Name:	<i>Langara College</i>
Role – Please select the best category for your current role with your organization. If more than one individual completed the survey, multiple categories may be selected:	Other - Please Specify: <i>Associate Director, Facilities</i>
Please select your sector:	Post Secondary (PS)

Stationary Sources (e.g. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Actions taken by your organization in 2019 to support emissions reductions from buildings

Do you have a strategy to reduce emissions from stationary sources?
Yes

Whether you have a strategy or not, briefly describe your organization's plans to continue reducing emissions from stationary sources:

Over the medium-term term (1-5 years)
<i>In particular, end of life equipment that requires upgrades are replaced with more efficient options - lighting, refrigeration, hvac units etc. We are also extending our new central heating plant to serve as a district heating system across campus. As we extend the system and upgrade the remaining old heating plant, we are considering additional ways of reducing the emissions of our primary heating source. We have been upgrading heating coils to low temperature in our buildings so our heating supply temperatures can be reduced and have an opportunity to make better use of low grade heating. We plan to investigate additional geo exchange potential on campus to feed our primary heating loop. We will continue to explore and stay informed on progress related to a future low carbon heating source along the Cambie corridor and how that could benefit the college. Rooftop units and similar systems will consider electric heat pump options. Further planning is planned and required to develop more detailed plans. We are currently piloting Real time energy management continuous optimization in one of our buildings. Continue solar PV installations across campus to increase renewable electricity component on campus. IT infrastructure thin clients upgrades and installs continue.</i>

Over the long term (6-10 years)

The above applies, additional planning is required. As new buildings are built on campus, new regulations will be incorporated as required.

Please describe your strategy's goals (if any) related to energy audits.

Over the next couple years, following the installation of several BTU energy meters, we will undertake building level audits and reconcile to energy usage to understand our energy usage further and to inform our planning process. We have realtime energy usage (electrical and gas) by building available in dashboard format. This is monitored and reviewed frequently. Energy reports are provided monthly by an external consultant and highlight changes in energy usage. This information has highlighted problem areas and is used to prioritize action. ... this is considered 20%.

What % on average of your building portfolio has an energy audit completed each year (if any)?

20

Please describe your strategy's goals (if any) related to building retrofits.

See above. In general, upgrading to most efficient, lowest emissions options where feasible. Following LEED principals.

Minor retrofits (e.g. low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.)

5

Major retrofits (e.g. replacing windows and doors, equipment replacement such as boilers, etc.)

5

Deep retrofits (e.g. replacing roof, replacing the heating, ventilation and air-conditioning system with a renewable technology like a ground-source heat pump, etc.)

5

Please describe your strategy's re/retro-commissioning goals (if any)?

Approximately 5 years ago, all our buildings were recommissioned, this was a very successful project. This year we are planning to pilot real - time energy management in one of our buildings. Additional commissioning was carried out following a large fan retrofit in our largest building, including ongoing review of energy usage and trend data to ensure system is performing as expected. Ongoing energy monitoring and reporting is carried out monthly. We plan to continue to re-commission buildings and systems and understand the value.

What % on average of your building portfolio do you recommission each year?

15

Do you keep records of Refrigerant gases¹ category and refilling volumes?

[1] Fugitive emissions from stationary cooling equipment are attributed to the leakage and loss of HFC and PFC based coolants from air conditioning and commercial type refrigeration systems. Coolant loss can occur during the manufacturing, operation, and disposal of such equipment. Gases that may be reported via CGRT include HFC R-134, HFC R-134a, HFC R-404a, HFC R-407c, HFC R-410a.

No

What, if any, mitigation approaches have been considered? Please describe.

We hire certified companies to carry out refrigeration servicing. Going forward we will request this information and track it.

How many newly constructed buildings received at least LEED Gold certification in 2019?

0

How many newly constructed buildings did not receive LEED Gold certification?

no new buildings

Please explain why LEED Gold certification was not obtained for those new buildings.

na

Other actions? Please describe briefly:

Gained approval to work towards AASHE Stars for Buildings

Mobile Sources (Fleet Vehicles, Off-road/portable Equipment): Fuel Combustion:

Actions taken by your organization in 2019 to support emissions reductions from mobile sources?

Do you have a strategy to reduce emissions from mobile sources?

Yes

Whether you have a strategy or not, briefly describe your organization's plans to continue reducing emissions from mobile sources:

Over the medium-term term (1-5 years)

Generally encourage use of public transit and active transportation and installing electric vehicle charging stations across campus.

Langara does not have a fleet of vehicles. Only one truck for our Theatre Arts program and a small snow plow.

Continue working on transit options for staff and students, including upgrading facilities and informing Translink of our usage requirements.

Generally installing electric vehicle charging stations, we now have 13.

Over the long term (6-10 years)

To continue to monitor and install EV stations as required and encourage transit and active transportation.

How many fleet vehicles did you purchase from the following categories:

Electric Vehicle – EV - (e.g., Nissan Leaf, Chevy Bolt)

0

"Plug In" Electric Vehicle – PHEV (e.g., plug-in Prius, Chevy Volt)

0

Hybrid vehicle – HEV – non "Plug In"- (e.g., Toyota Highlander Hybrid)

0

Hydrogen fuel cell vehicle

0

Natural gas/propane

0

Gas/diesel vehicle

0

If you purchased new gas/diesel vehicles, can you briefly explain why vehicles from the other categories were not chosen?

na

Actions taken by your organization in 2019 to support emissions reductions from mobile sources? (Continued)

How many existing EV charging stations does your organization have in each category:

Level 2?

14

Level 3?

0

How many level 2 stations (if any) are specifically for your fleet vehicles?

As defined as Level 2 stations only your organization's fleet vehicles may use

0

How many level 3 stations (if any) are specifically for your fleet vehicles?

As defined as Level 3 stations only your organization's fleet vehicles may use

0

How many EV charging station(s) did you install in 2019 in each category:

Level 2?

6

Level 3?

0

How many level 2 stations (if any) were installed specifically for your fleet vehicles?

As defined in the previous section

0

How many level 3 stations (if any) were installed specifically for your fleet vehicles?

As defined in the previous section

0

Please briefly describe any other related actions, (e.g. charging station feasibility studies, electrical panel upgrades, etc.)

installed electrical conduit for future charging stations under long drive aisle in association with a drainage upgrade project.

Please indicate the total number of the vehicles in the following vehicle classes that are in your current fleet

Definitions:

- Light duty vehicles (LDVs) are designated primarily for transport of passengers <13 and GVWR<3900kg
- Light duty trucks (LDTs) are designated primarily for transport of light-weight cargo or that are equipped with special features such as four-wheel drive for off-road operation (include SUVs, vans, trucks with a GVWR<3,900kg)
- Heavy duty vehicles (HDV) includes vehicles with a GVWR>3,900 kg (e.g. ¾ tonne pick-up truck, transport trucks)

Light duty vehicles (LDVs)

Electric Vehicles – EV - (e.g., Nissan Leaf, Chevy Bolt)

0

“Plug In” Electric Vehicle – PHEV -- (e.g., plug-in Prius, Chevy Volt)

0

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Toyota Prius, Toyota Camry hybrid)

0

Hydrogen fuel cell vehicles

0

Natural gas/propane

0

Gas/diesel

0

Light duty trucks (LDTs)

Electric Vehicles – EV

0

“Plug In” Electric Vehicle – PHEV

0

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Ford Escape Hybrid, older Chevrolet Silverado pickup hybrid, etc)

0

Hydrogen fuel cell vehicles

0

Natural Gas/propane

0

Gas/diesel

1

Heavy duty vehicles (HDV)

Electric Vehicles – EV
0

“Plug In” Electric Vehicle – PHEV
0

Hybrid vehicles – HEV – (e.g., non “Plug In”)
0

Hydrogen fuel cell vehicles
0

Natural Gas/propane
0

Gas/diesel
0

Actions taken by your organization in 2019 to support emissions reductions from paper supplies.

Briefly describe your organization’s plans to continue reducing emissions from paper use:

Over the medium-term (1-5 years)
<i>All Multi-function devices are set to double sided printing as a default. Looking at digital options for course packs and instructor notes. Digital textbooks. Login to print only. Potential large savings with digital approvals through new ERP system.</i>

Over the long term (6-10 years)
<i>Potential large savings with digital approvals through new ERP system.</i>

Do you have an awareness campaign focused on reducing office paper use?
No

Purchased alternate source paper (bamboo, hemp, wheat, etc.)
Yes