



**The path
forward.**

Coast Mountain College 2018 Carbon Neutral Action Report



**Wide open
learning.**

Executive Summary

Coast Mountain College is pleased to submit its 2018 Carbon Neutral Action Plan. This year's report contains our 2018 emissions profile, offsets purchased, the actions we have taken in 2018 to reduce our GHG emissions and our plans to continue reducing emissions. By June 30th Coast Mountain College's final CNAR will be posted to our website at www.coastmountaincollege.ca.

We were excited to launch our new name and brand, Coast Mountain College, on June 18, 2018. Our focus is to establish adventurous learning pathways for our students by creating experiential classrooms that feature our stunning locale. By exploring our diverse regional ecosystems, we can blend academic pursuits while modelling positive environmental stewardship. Our local environment is frequently our classroom which highlights the importance of developing projects with the goal of reducing our carbon footprint.

We are pleased to report a significant reduction in our GHG's in 2018. A major factor was a milder winter resulting in a significant reduction in our stationary fuel consumption. We also saw savings with the substantial completion of our \$18.4 million dollar renovation project of our Cedar, Trades Building at the Terrace Campus. The reduced use of equipment using mobile fuels along with the modernization of mechanical systems within the building resulted in lower emissions in both our mobile and stationary fuel consumption.

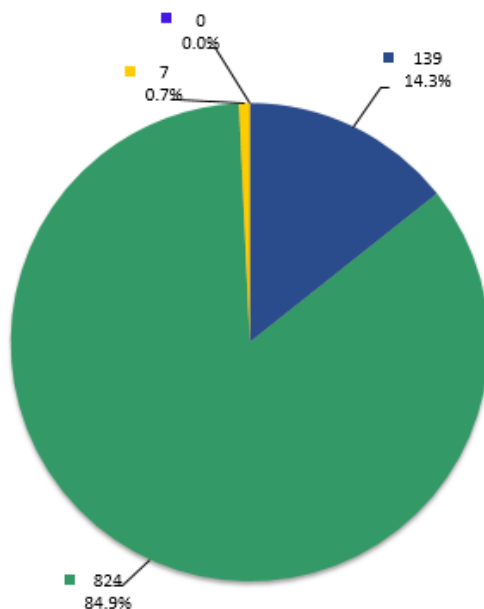
A mechanical failure in the heating system within one of our student housing buildings in Terrace, resulted in significant flood damage in the winter of 2017. As a result, the College embarked on a major renovation project of the structure which included upgraded insulation, new lighting fixtures and upgraded kitchen equipment. The project has updated the the appearance of the building and has significantly improved its energy efficiency. Due to the success of the project, we are currently in the process of completing upgrades on two more student housing buildings on the Terrace Campus.

The College is embarking on diversifying the operational fleet and has purchased two ETV vehicles for use on the Terrace Campus. The vehicles are replacing some of the older fossil fuel vehicles that are used for shuttling equipment and personnel around the site. We are exploring further options for use of these vehicles and may expand the fleet further depending on the viability of expanded use.

The College will continue to demonstrate its commitment as a post-secondary institution to reduce greenhouse gas emissions, while engaging all members of the college community, by supporting the many initiatives that contribute to sustainability and the reduction of our carbon footprint.

Coast Mountain College GHG Emissions and Offset for 2018 (tCO ₂ e)	
GHG Emissions created in Calendar Year 2018	
Total Emissions (tCO ₂ e)	970
Total Offsets (tCO ₂ e)	963
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO ₂ e)	0
Total Offsets (tCO ₂ e)	0
Grand Total Offsets for the 2016 Reporting Year	
Grand Total Offsets (tCO ₂ e)	963

Coast Mountain College
Greenhouse Gas Emissions by Source
for the 2018 Calendar Year (tCO₂e*)



Total Emissions: 970

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)
- Fugitive Sources

Actions Taken to Reduce Greenhouse Gas Emissions in 2018

- Upgrades to Mechanical, Electrical, HVAC systems to Terrace Trades Building
- Purchase of 2 ETV's to reduce of older fleet vehicles within Terrace Campus area
- Upgrade to Student Housing Building to improve appearance and create energy efficiencies
- Increased utilization of recycling services by local contractors
- Further upgrades of the institution's lighting to LED
- ICS upgrades of video conference applications for instructional and administrative use
- Increase in experiential learning options to reduce the use of paper in classroom instruction.



Plans to Continue Reducing Greenhouse Gas Emissions in 2019

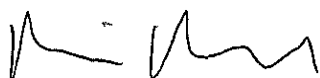
- Upgrade to two student housing buildings to improve appearance and energy efficiencies.
- Upgrades to older water heating systems in regional campuses.
- Continued replacement of older fleet vehicles with more fuel efficient and/or electric vehicles.
- Continue to encourage information sharing through shared network access and college portal.
- Continue to transfer paper based departmental forms to electronic forms.



Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Coast Mountain College is responsible for arranging for the retirement of the offsets obligation reported above for the 2018 calendar year, 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 within 30 days, 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.

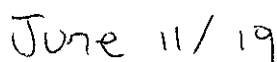
Executive sign-off



Signature

Michael Doyle

Name



Date

Vice-President, Corporate Services

Title



Part 1: CNAR Survey

1. General Information

Name: Christine Speidel

Contact Email: cspeidel@coastmountaincollege.ca

Organization Name: Coast Mountain College

Sector: Post Secondary

Role - Please select your role(s) below.

If more than one individual completed the survey, multiple categories may be selected:

Energy Manager: No

Sustainability Coordinator: No

Administrative Assistant: No

Facilities/Operations Manager/Coordinator: Yes

CEO/President/Exec Director: No

Treasurer/Accounting: No

Superintendent: No

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

1. Actions taken by your organization in 2018 to support emissions reductions from buildings.

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

No

b) Whether you have a strategy or not (1.a), briefly describe your organization's plans to continue reducing emissions from stationary sources:

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

Continued renovations to existing buildings with the goal of reducing GHG emissions by ensuring that energy saving solutions are sought and sustainable products sourced where applicable.

II. Over the long term (6-10 years)

Submission of business cases to support replacement of aging structures in order to reduce GHGs.

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

No

I. What % on average of your building portfolio has an energy audit completed each year (if any)? : 0

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

At this time our strategy is based on information provided through VFA audits and reports and associated requirements required of all building systems.

I. What % on average of your building portfolio is retrofitted each year in the following categories (if any) - click [here](#) for further information:

Minor retrofits (e.g., low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.) (%): 10

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.) (%): 0

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

None at this time

I. What % on average of your building portfolio do you recommission each year?: 0

f) Do you keep records of Refrigerant gases category and refilling volumes?

No

II. Please explain why LEED Gold certification was not obtained.

no new construction

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

3. Actions taken by your organization in 2018 to support emissions reductions from mobile sources.

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

No

b) Whether you have a strategy or not (3.a), briefly describe your organization's plans to continue reducing emissions from mobile sources:

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

Continued replacement of aging fleet with hybrid options where available

II. Over the long term (6-10 years)

Potential investment in electric vehicles if local infrastructure development supports the regional use of the vehicle

c) 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: 2

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

Not practical for our fleet. We serve a broad regional scope in the northwest of the province. Electric vehicles do not have the necessary range for our purposes nor are there any heavy duty models that serve our fleet requirements. Electric batteries do not hold a charge well in the winter months. At this point the only units we have are two hybrid cars which work well for business needs.

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

level 2: 1

level 3: 0

How many level 2 stations (if any) are specifically for your fleet vehicles: 0

How many level 3 stations (if any) are specifically for your fleet vehicles: 0

e) How many EV charging station(s) did you install in 2018 in each category:

level 2: 0

level 3: 0

How many level 2 stations (if any) were installed specifically for your fleet vehicles: 0

How many level 3 stations (if any) were installed specifically for your fleet vehicles: 0

f) Other actions, please describe briefly (e.g. charging station feasibility studies, electrical panel upgrades, etc.)

None

4. Please indicate the number of the vehicles in the following vehicle classes that are in your current fleet (including any purchased in 2018):

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)

a) 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): 2

Hydrogen fuel cell vehicles: 0

Natural gas/propane: 0

Gas/diesel: 7

b) 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: 6

c) 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: 13

5. Please indicate the number of the vehicles you plan to replace in your fleet:

How much do you budget per LDV?: 35000

How many LDVs do you plan to procure annually over the next 5 years?: 4

How much do you budget per LDT?: 50000

How many LDTs do you plan to replace annually over the next 5 years?: 2

How much do you plan to spend per HDV?: 0

How many HDVs do you plan to replace annually over the next 5 years?: 4

C. Office Paper: Indicate which actions your PSO took in 2018:

6. Actions taken by your organization in 2018 to support emissions reductions from paper supplies.

a) Do you have an Office Paper strategy?

No

b) Whether you have a strategy or not (6.a), briefly describe your organization’s plans to continue reducing emissions from paper use:

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

Continued use of web content for instruction, pdf fillable forms, - etc.

II. Over the long term (6-10 years)

Continued use of web content for instruction, pdf fillable forms, - etc.

c) Have an awareness campaign focused on reducing office paper use

No

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

No

e) Other actions, please specify.

none