

CNAR OVERVIEW

Title: "2017 Carbon Neutral Action Report"

Organization name: School District #78 (Fraser Cascade)

Declaration statement: This Carbon Neutral Action Report for the period January 1st, 2017 to December 31st, 2017 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2017 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2018 and beyond.

By June 30, 2018 School District #78(Fraser Cascade) final *Carbon Neutral Action Report* will be posted to our website at www.sd78.bc.ca

Overview:

SUMMARY

The School District has had a busy year with the continued funding from the Ministry of Education to support district initiatives. Funding was supported for HVAC, and LED lighting upgrades. The School District has added a portable and it operationally using more of its ancillary space to support the education based requirements. The long range objective is to reduce energy consumption by twenty percent from inception of the initiative. School District #78 has been working diligently towards meeting their targeted objectives and will continue to search for opportunities to support our initiatives.

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2017

- The continued replacement of boilers and hot water systems with high efficiency condensing equipment and tank- less on demand hot water systems
- Numerous conventional gas furnaces being replaced with high efficiency condensing types
- LED complete lighting upgrades at two school including exterior
- Continuing with building automation upgrades to increase efficiency and develop the best practices to achieve the District's goals
- Continue to monitor bus routes to maximize transportation efficiencies
- Continue to eliminate the creation of paper documents wherever possible and replace with electronic documents
- Continue to ensure replacement or additional fleet vehicles are purchased with energy efficiency as a priority

PLANS FOR CONTINUED SUCCESS IN 2018 AND BEYOND

The School District will be completing a new hydronic heating system at AESS and will be continuing with the District's initiative to convert all lighting to LED. We will also continue to replace existing older heating equipment with higher efficient equipment at every opportunity. The School District has initiated its own snow removal program which may have negatively affected consumption rates for reporting but the benefits are very measurable. Custodial services over the summer will be team based allowing for the district to shut down HVAC equipment at sites where there are no staff working. The School District will continue to look for every opportunity for initiatives and to continue to educate and encourage all staff on conservation and optimization programs.

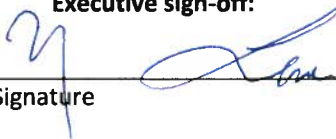
Emissions and Offset Summary Table:

| <i>School District No. 78 (Fraser Cascade) GHG Emissions and Offset for 2017 (tCO₂e)</i> | |
|---|-------|
| GHG Emissions created in Calendar Year 2017 | |
| Total Emissions (tCO ₂ e) | 1,118 |
| Total Offsets (tCO ₂ e) | 893 |
| 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 2017 Reporting Year | |
| Grand Total Offsets (tCO ₂ e) | 893 |

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *School District No. 78 (Fraser Cascade)* (the **Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2017 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy 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 | JUNE 5, 2018 Date |
| NATALIE LOVE Name (please print) | SEC. TREASURER Title |

Part 1: CNAR Survey

1. General Information

Name: Doug Templeton

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Organization Name: School District #78

Sector: School District

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

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Performed energy retrofits of the organization's building(s)

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 5

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?: 0

Did your Organization perform any retrofits during 2017? Please describe briefly:

The district completed two school LED lighting retrofits for entire buildings. The district also replaced a number of low efficiency stand alone furnaces with high efficiency units. AESS has initiated a boiler upgrade and new hydronic roof top units in Gym and Shop areas. Automated control systems have been upgraded and reprogrammed for efficiencies.

2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emissions from its stationary sources:

a) Over the next 1-5 years

The District will continue with its LED lighting program to encompass all sites. The district will also move forward to ensure all heating equipment is of the highest efficiency and the automated controls and programming matched to the new equipment. The District will continue to develop awareness through education and training to ensure that the culture of conservation is further developed and sustained.

b) Over the following 6-10 years

The District will endeavour to continually upgrade equipment with reduction in emissions as the targeted goal. The District will also be looking at alternate sources of energy including solar as it has demonstrated in the past with solar wall heating installations. We are exploring alternate heating sources for some sites and looking into solar panels for electricity generation.

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

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?: 2

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?: 0

3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

a) Over the next 1-5 years

The District will continue to review every vehicle purchase with the consideration for reducing emissions where ever possible and will be purchasing electric vehicles including buses.

b) Over the following 6-10 years

The District will endeavour to ensure that all vehicles used for basic commuting shall be electric and that vehicles that are designed for service work are of the most efficient type matched to the requirement.

4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

Had a policy requiring the purchase of recycled content paper

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%): 30

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

Please briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

5. Other Sustainability Actions

a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials

c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

A water conservation strategy which may include a plan or policy for replacing water fixtures with efficient models; An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities