

2018 Carbon Neutral Action Report School District No 75 (Mission)

May 27, 2019

This 2018 Carbon Neutral Action Report for the period January 1, 2018 to December 31, 2018 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2018 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2019 and beyond.

By June 30, 2019, the final Carbon Neutral Action Report for School District No 75 will be posted to our website at www.mpsd.ca.

School District No 75 promotes GHG emission reductions and environmental sustainability through both specific initiatives and guiding policies and procedures. The district's *Environmental Sustainability* policy promotes learning and leadership opportunities related to sustainability, energy and resource conservation, support for continuous monitoring of key environmental metrics, and support for environmental stewardship for both students and staff. The district also has an administrative procedure which established baseline energy consumption metrics, and stipulates the establishment of quarterly energy metrics, an annual review of targets, a target of 5% annual reduction of energy consumption, and remaining compliant with District of Mission GHG emission reduction targets (20% reduction between 2008 and 2020). While these policies, procedures, and goals remain in place, the loss of senior district positions in this area, including a dedicated Energy Manager, along with other funding constraints, has had a significant impact on the ability of the district to continue with the monitoring, reporting, and implementation of initiatives necessary to meet district goals.

Despite fiscal pressures, there were several initiatives taken in 2018 to reduce GHG emissions, including:

- Mechanical upgrade at Edwin S. Richards Elementary School to replace the existing old, inefficient boiler and sanitary sewer lift station
- Mechanical upgrade at Mission Central Elementary to replace the existing old, inefficient boiler and domestic hot water system
- Mechanical upgrade at Heritage Park Middle School to replace the existing old, inefficient main heating plant
- Wattage reduction continues across all district facilities, helping to reduce annual kilowatt hours of electrical energy

Going forward into 2019 and beyond, there are plans for further reduction of GHG emissions, including:

- Upgrade to high efficiency boiler and domestic hot water system at Dewdney Elementary School
- Upgrade of HVAC system at Mission Secondary School
- Condensing unit upgrade at Heritage Park Middle School

All proposed initiatives are contingent upon adequate capital funding.

Emissions and Offsets Summary:

School District No 75 GHG Emissions and Offsets for 2018 (TCO2E)	
GHG Emissions Created in Calendar Year 2018:	
Total Emissions	2,019
Total Emissions for Offsets	1,614
Adjustments to GHG Emissions Reported in Previous Years:	
Total Emissions	0
Total Emissions for Offsets	0
Grand Total Offsets for the 2018 Reporting Year:	
Total Emissions for Offsets for the 2018 Reporting Year (from Offset Invoice):	1,614

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No 75 (the Organization) 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 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

Date

May 27, 2019

Corien Becker

Secretary Treasurer

Name (please print)

Title

Part 1: CNAR Survey

1. General Information

Name: Derek Welsh

Contact Email: derek.welsh@mpsd.ca

Organization Name: School District No. 75

Sector: School District

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: No

CEO/President/Exec Director: No

Treasurer/Accounting: Yes

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)

Replacement/upgrade of inefficient heating and electrical systems and components with more efficient systems, as provincial capital funding permits.

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

Replacement/upgrade of inefficient heating and electrical systems and components with more efficient systems, as provincial capital funding permits.

Replacement of 70 year old secondary school when provincial capital funding available, which will be constructed to the most recent building and energy efficient standards - LEED gold standards.

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

Replacement/upgrade of inefficient heating and electrical systems and components with more efficient systems, as provincial capital funding permits.

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

No

h) Other actions? Please describe briefly.

Completed or In-Progress :

1. Dewdney Elementary - Replaced existing boilers with new high efficiency condensing boiler system and variable speed pumps, and upgraded domestic hot water system (completed in 2018);
2. Mission Secondary - Replaced two end of life condensing units with new higher efficiency units;
3. Hatzic Middle School and West Heights Elementary - LED lighting replacement project (2018 and continuing);

Future (pending capital funding availability):

1. Condensing unit replacement of AHU#3 at Heritage Park Middle and AHU#7 at Mission Secondary
2. Replacement of gas fired downflow furnaces with multi-unit ventilators at West Heights Elementary
3. Boiler system and domestic hot water system replacement at Stave Falls Elementary
4. LED lighting implementation ongoing at various sites

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)**

Replacement of older fleet vehicles with more fuel efficient or alternative energy models, as capital funding permits.

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

Replacement of older fleet vehicles with more fuel efficient or alternative energy models, as capital funding permits.

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: 5

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

3 diesel school buses

2 gas facility fleet vehicles (transit van, cargo van)

Other categories not chosen due to cost (limited capital funding available)

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

level 2: 0

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

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): 0

Hydrogen fuel cell vehicles: 0

Natural gas/propane: 0

Gas/diesel: 1

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: 23