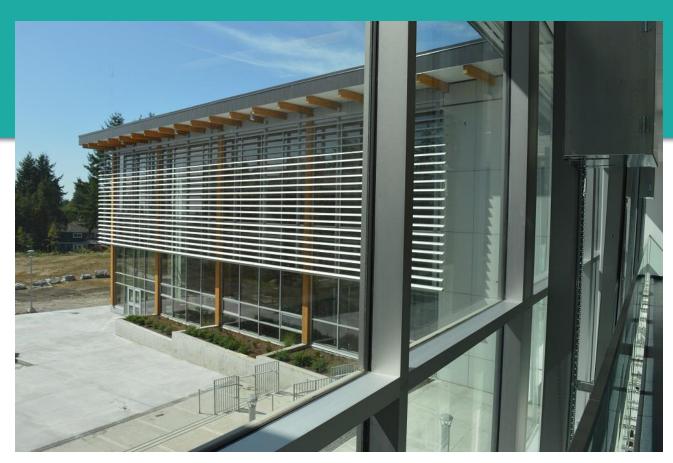
# School District No. 43 (Coquitlam) 2018 Carbon Neutral Action Report



Newly Constructed Centennial Secondary School





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#### **EXECUTIVE SUMMARY**

This Carbon Neutral Action Report for the period January 1st, 2018 to December 31st, 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.

Over the last few years, there has been increased interest and excitement by our Board of Education to consider climate change and sustainability as a District priority. The education of staff, students, and parents on the impact of our behaviors around energy consumption and conservation have become integrated into our daily actions. The Coquitlam School District continues to fully support BC Climate Action Legislation and the targets established by the Greenhouse Gas Reduction Targets Act of 2007. We have established a culture of awareness and action and have worked diligently to reduce our carbon footprint through multiple means. The increasing financial and environmental costs of utility consumption, waste management, fuel and paper consumption remain a concern for our District leaders. Energy conserving strategies implemented should not compromise indoor thermal comfort, lighting levels or air quality; it is the responsible management of these resources that makes the difference.

Coquitlam School District began taking comprehensive action against climate change by promoting environmentally sustainable designs for all schools. Our ongoing goal of reducing our overall energy consumption by 3% annually providing significant cost savings to the District and financing further energy conservation projects. Since 2010, total GHG emissions in SD43 have dropped by 40 %.

Through the work of staff, students and our larger community, Coquitlam School District will continue to implement further changes addressing climate action targets and pursue carbon neutrality through the mantra, EDUCATION, ACTIVATION AND INNOVATION.

Our sustainability mandate continues to be based on District guidelines that contribute to our overall goals of energy management and environmental sustainability. Some of the key objectives in our District guidelines are:

- Educate students and staff on energy consumption, carbon footprint, and the moral imperative
- Engage students and staff in climate action programs to promote sustainable behavior
- Support projects to reduce energy consumption and our carbon footprint
- Participate in the design of new buildings to ensure the implementation of up-to-date sustainable design practices
- Maintain a well-represented SD43 Executive Green Committee that works closely with executive management

#### **DECLARATION STATEMENT**

This Carbon Neutral Action Report for the period January 1st, 2018 to December 31st, 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 2018 and beyond.

#### SD43 EMISSIONS AND OFFSET SUMMARY TABLE 2018:

In 2018, total emissions were 7,083 tCO<sub>2</sub>e. Of those emissions, 10 tCO<sub>2</sub>e were from low-carbon biogenic mobile equipment fuels which do not require an offset payment. This means that for the 2018 calendar year, only 7,073 tCO<sub>2</sub>e of offsets are required. However, adjustments from prior years also had to be accounted for which were only 5 tCO<sub>2</sub>e. Hence, the total offsets required for 2018 including adjustments are 7,078 tCO<sub>2</sub>e.

Coquitlam School District (#43) GHG Emissions and Offset for 20	018 (tCO2e)
GHG Emissions created in Calendar Year 2018	
Total Emissions (tCO2e)	7,083
Total BioCO2	10
Total Offsets (tCO2e)	7,073
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO2e)	5
Total Offsets (tCO2e)	5
Grand Total Offsets for the 2018 Reporting Year (from SMARTTool Homepage): (This is the total of emissions that must be offset for Reporting Year 2018)	
Grand Total Offsets Required (tCO2e)	7,078
Total Offset Investment (Grand Total Offsets Required X \$25/tCO2e)	\$176,950
*Note, for School Districts, Total Offsets will not equal Total Emissions minus Total BioCO2 because offset exemptions for school buses are included within Total Emissions.	

#### **RETIREMENT OF OFFSETS**

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, The Coquitlam School District No. 43 (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 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:**

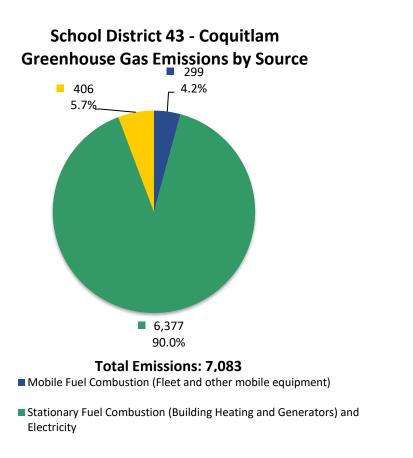
-		
<u> </u>	May 29, 2019	
Signature	Date	

Chris Nicolls	Secretary-Treasurer/CFO	
Name (please print)	Title	

<sup>\*</sup>Signature by senior official such as CEO, COO, Secretary Treasurer or Superintendent

## GREENHOUSE GAS EMISSIONS SOURCE BREAKDOWN

The chart below shows the breakdown for the Greenhouse Gas Emissions by source in 2018 at SD43. As shown, 90.0% of emissions are from energy consumption in buildings. Fleet and paper comprise the remaining 9.9%.



#### Offsets Applied to Become Carbon Neutral in 2018 (Generated May 22, 2019

<sup>\*</sup>Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

## OFFSETS APPLIED TO BECOME CARBON NEUTRAL IN 2018

Total offsets required for 2018 including adjustments are 7,078 tCO<sub>2</sub>e. At the government offset price of \$25/tCO<sub>2</sub>e, the total offset investment is \$176,950 which allows the District to achieve carbon neutrality for 2018. Emissions exempt from offset payment are 7 tCO<sub>2</sub>e which are from low-carbon biogenic fuels.

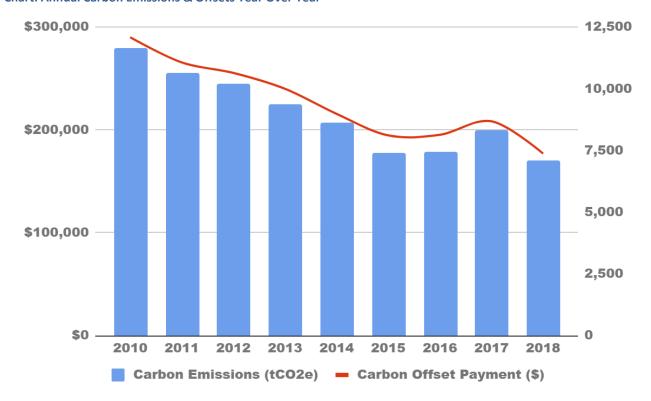
#### CHANGES TO GREENHOUSE GAS EMISSIONS AND OFFSETS FROM BASELINE YEAR 2010

In 2010, the total offsets required were 11,601 tCO<sub>2</sub>e. Total offset investment was \$290,025.00. As a result, in 2018, SD43 saw a reduction in emissions by 4,571 tCO<sub>2</sub>e and \$113,075 in offset payment representing a drop of 40% over baseline.

#### ANNUAL EMISSIONS AND OFFSETS YEAR OVER YEAR

Year	Carbon Emissions (tCO2e)	Carbon Offset Payment (\$)
2010	11,649	\$290,025
2011	10,636	\$265,575
2012	10,216	\$255,400
2013	9,392	\$239,950
2014	8,623	\$215,575
2015	7,417	\$194,696
2016	7,436	\$195,195
2017	8,343	\$208,400
2018	7,078	\$176,950

**Chart: Annual Carbon Emissions & Offsets Year Over Year** 



## ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2018

SD43 has been a Power Smart Partner with BC Hydro for many years and has utilized the Energy Manager Program with BC Hydro to employ an Energy Manager. The District has also utilized the Energy Specialist Program with FortisBC to employ an Energy Specialist which has added significant scope to our Energy Management portfolio. Our executive management met regularly in 2018 for BC Hydro Quarterly presentations to provide support and guidance around energy conservation and environmental sustainability initiatives. Our Maintenance Department continues to use infrastructure funding for lighting retrofits, HVAC upgrades, and improvements to DDC (Direct Digital Controls) which directly improve energy efficiency and reduce energy costs.

Our Energy Team continues to work in partnership with our DDC (Direct Digital Control) Technologist and HVAC Supervisor to align daily operation scheduling to reduce energy consumption in buildings across the district while pursuing continuous optimization.

#### **HEATING PLANT UPGRADES**

In 2018, like almost all other years, 90% of greenhouse gas emissions were from the combustion of natural gas for heating. This is one of our key drivers to prioritize retrofit heating projects by replacing inefficient plants with high efficiency condensing boilers with variable frequency drives. These projects have multiple benefits, including better efficiency, a high turn-down rate, and a far superior ability to meet building load. All of this amounts to reduced natural gas consumption and in turn reduced emissions.

#### 2018 HEATING PLANT RETROFIT PROJECTS:

- Summit Middle School
- Coquitlam River Elementary
- Hazel Trembath Elementary



### LIGHTING UPGRADES

In 2015, SD43 proudly initiated the first full-school LED lighting upgrade in BC saving over 230,000 kWh annually. In 2018, the District continued to implement full-school LED upgrades across numerous sites, and this program will continue for years to come.



#### 2018 LED LIGHTING RETROFIT PROJECTS

In 2018, SD43 proudly continued to change our schools to LED lighting and improved lighting controls. One of the districts largest Secondary schools, Gleneagle took on a full LED retrofit bosting savings of 483,600 kWh / yr. In addition, SD43 has a continued effort to replace non-efficient lighting throughout the district with LED.

Also, in 2018, SD43 carried out a cutting-edge lighting technology research project at Riverside Secondary in conjunction with BC Hydro and the University of British Columbia. Tunable LED lights allow users to change the color temperature from warm yellow to cool white and the project aims to evaluate the relationship between lighting color temperature and student performance.

#### **NEW CONSTRUCTION**

At SD43, all new capital construction projects continue to employ innovative and sustainable design practices by complying with LEED Gold building standard.

In 2018 we replaced two of our oldest and worst performing middle schools, Port Moody Middle and Banting Middle. In addition, a new school names Smiling Creek in Port Coquitlam, was completed to LEED Gold standards and is viewed as a showcase of design and efficiency.





The new Banting Middle School, with its new Viessman boiler plant on the right.

#### BEHAVIOURAL PROGRAMS

We implemented various energy conservation and behavioral campaigns in 2018 with great success. A major contributor to the success of our campaigns was the enthusiastic participation by students, teachers and our executive team.

#### SD43 EXECUTIVE GREEN COMMITTEE

Our SD43 Executive Green Committee was initiated in 2017 with our first meeting held in February 2018. We are very pleased to have committed executive leaders who support our green initiatives and policies. Their input and resources are invaluable to the success of our committee.

#### SMALL APPLIANCE SHUTDOWN CAMPAIGN

With the assistance of BC Hydro Energy Wise Network, SD43 launched a Small Appliance Shutdown campaign raising awareness and instilling behavioral actions. Impactful posters and shutdown checklists were distributed throughout the school district. Participating schools were asked to complete the checklists for their school as well as submit behavioral action photos.





### SWEATER CAMPAIGN

A district wide Sweater Campaign was implemented with the assistance of BC Hydro Energy Wise Network. Schools were invited to participate by raising energy conservation behavioral awareness through posters, social media and by submitting sweater day photos. Nine schools enthusiastically participated in our Sweater Campaign by submitting some very creative behavioral photos. Our Energy Team visited each of the schools and presented a Sweater Mug to the School Admin Team and thanked them for participating in our behavioral campaign.

#### **PRINT-WISE**

The District continues to move forward on its overall print strategy, "Print-wise", replacing and/or removing all outdated printers and fax machines and monitoring user copy/print volumes. This new approach showed a decrease in paper and copy amounts and costs. All schools continue to phase out excessive printers to further reduce consumption. Also, more teachers, staff and schools are going to paperless newsletters and notices, as well as creating virtual classrooms and online homework and discussion boards in attempts to reduce paper consumption. District level meetings encourage posting handouts online and increased use of tablet technology to review resources and electronically recorded notes.

## PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2019

School District 43 will continue to reduce Greenhouse Gas Emissions by educating our students, staff and parents, facilitating actions and promoting innovations leading to sustainable behavioral change throughout our community.

As part of our overall strategy to reduce our GHG emissions, Coquitlam School District has made energy management and environmental sustainability a priority. With the continued support from the Ministry as well as BC Hydro and FortisBC, the District will continue to make every effort to meet or exceed the annual energy reduction target of 3%.

Facilities and Maintenance will continue with HVAC and lighting upgrades to contribute to more energy efficient buildings and better learning and working environments for students and staff. Also, as part of the design process for new schools, the District will continue to consult with energy modelers to ensure that all new buildings perform at optimal levels of energy efficiency. In 2019, the following projects will take place:

#### **HEATING UPGRADES**

- Minnekhada Middle:
  - New Construction high-efficient boilers and water heaters
- Seaview Elementary:
  - Replace existing boilers and water heaters with high-efficient boilers and water heaters
     Energy savings: 400 GJ
- Mountain View Elementary:
  - Replace existing boilers and water heaters with high-efficient boilers and water heaters
     Energy savings: 425 GJ

### LIGHTING UPGRADES

- Pinetree Senior Secondary:
  - o LED upgrade. Project cost: \$430,000. Energy savings: 430,028 kWh / yr.

#### • Millside Alternative School:

o LED upgrade. Project cost: \$32,500. Energy Savings: 84.686 kWh / yr.

#### Vanier Alternative School:

o LED upgrade. Project cost \$63,050. Energy Savings 81,043 kWh/yr.

#### James Park Annex:

- o Project cost \$18,240. Energy Savings 19,393 kWh/yr.
- Exterior LED replacements; Cedar Dr., Charles Best SS; Vanier; Seaview Elm. Energy savings 36,800 kWh/ yr.

#### DISTRICT WIDE 4-BIN RECYCLING

We have and will continue in 2019 implement a standardized **4-bin Recycling System** throughout the District. Roll out occurred through the Spring break period this March. We will continue to monitor and ensure this change is well adopted throughout 2019.



## CONCLUSION

The District continues to strive towards a combination of both technical and behavioural projects to reduce energy consumption across our portfolio. The historical data speaks for itself, with a 40% reduction since 2010 that has exceeded both our internal goals and those set out by the provincial government, we are proud to be leaders in the climate action field.

We are confident that with sustained executive support and the enthusiasm of students and educators, the District will continue to surpass its GHG reduction goals. Our enduring optimism is driven by the belief that educating through example will be the best path to a greener tomorrow.

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## Patricia Gartland

## Superintendent of Schools

School District 43 (Coquitlam)

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# Chris Nicolls

Secretary Treasurer

School District 43 (Coquitlam)



## APPENDIX A: GHG EMISSIONS SOURCE DETAIL REPORT

# School District 43 - Coquitlam Greenhouse Gas Emissions Source Detail Report for the 2018 Calendar Year Generated: May 22, 2019

	Source	Quantit	у		Greenhouse Gases In Tonnes		
				CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	tCO <sub>2</sub> e *
ationary Fuel Com	bustion (Building Heating and Gen	erators) and	Elec	tricity			
Offeet Beguired	Fuel Combustion **	123,138.89	CI	6,105.23	0.12	0.11	6,141.3
Oliset Required	Purchased Energy	78,669.50		236.01	0.12	0.00	236.0
	Offset Required Sub Total	-	GJ	6,341.23	0.00	0.00	6,377.
	Oliset Required Sub Total			0,341.23	0.12	0.11	0,377.
	TOTAL STATIONARY EMISSIONS			6,341.23	0.12	0.11	6,37
upplies (Paper)							
Offset Required	Non-recycled Content Paper	350	Pkg	2.24	0.00	0.00	2.:
·	Recycled Content Copy Paper	69,014		403.66	0.00	0.00	403.
	Offset Required Sub Total			405.90	0.00	0.00	405.
	TOTAL SUPPLIES EMISSIONS			405.90	0.00	0.00	4
obile Fuel Combus	stion (Fleet and other mobile equip	ment)					
Offset Required	Fuel Combustion **	116,662.25	L	274.42	0.02	0.05	289.
	Offset Required Sub Total			274.42	0.02	0.05	289.
Offset Exempt	CO <sub>2</sub> from Biogenic Fuel Combustion			9.90	N/A	N/A	9.
	Offset Exempt Sub Total			9.90	0.00	0.00	9.
	TOTAL MOBILE EMISSIONS			284.33	0.02	0.05	2
	Total Offset Exempt			9.90	0.00	0.00	
	Total Offset Required			7,021.56	0.14	0.16	7,0
	TOTAL EMISSIONS			7,031.46	0.14	0.16	7,0

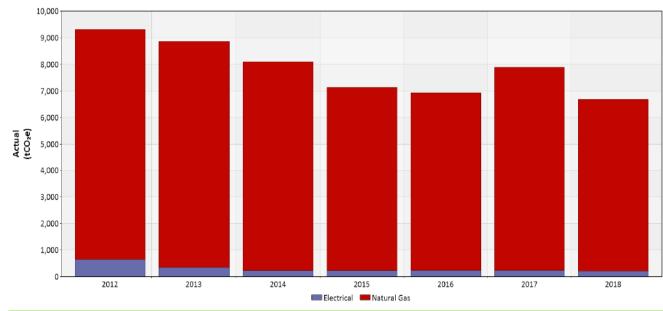
<sup>\*</sup> Each greenhouse gas has been converted to a standard measurement (tCO<sub>2</sub>e) by multiplying its emissions by its global warming potential (GWP).

The GWP of carbon dioxide (CO<sub>2</sub>) from both anthropogenic and biogenic sources is 1; methane (CH<sub>4</sub>) is 25, and nitrous oxide (N<sub>2</sub>O) is 298.

The Totals for tCO<sub>2</sub>e are shown here rounded to the nearest whole metric tonne as only whole tonnes of tCO<sub>2</sub>e can be purchased for offsets.

<sup>\*\*</sup> Includes Fossil Fuels and CH<sub>4</sub> and N<sub>2</sub>O from Biogenic Fuels

# APPENDIX B: ANNUAL GREENHOUSE GAS EMMISIONS BY SOURCE

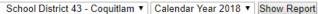


	Electrical	Natural Gas
Year	Emissions <sup>2</sup>	Emissions tCO₂e
	tCO₂e	tCO₂e
2012	656	8,673
2013	354	8,529
2014	240	7,869
2015	241	6,895
2016	244	6,695
2017	244	7,662
2018	222	6,467
Overall:	2,200	52,790

## APPENDIX C: SMART TOOL EMISSIONS REPORT 2018

May 28, 2019

#### Reporting Unit:





#### Totals Calendar Year 2018, School District 43 - Coquitlam

			Greenhouse Gases in				n Tonnes	
	Measure	Quantity	CO <sub>2</sub>	BioCO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	tCO <sub>2</sub> e 1	
Scope 1 (Direct) Emissions								
Mobile Combustion (Fleet)	Litres	116,662.25	274.42	9.90	0.02	0.05	299.45	
Stationary Combustion, Reported <sup>3</sup>	GigaJoules	123,138.89	6,105.23	0.00	0.12	0.11	6,141.33	
Carana 2 (Indiana) Emiraiana								
Scope 2 (Indirect) Emissions								
Purchased Energy, Reported <sup>3</sup>	GigaJoules	78,669.50	236.01	0.00	0.00	0.00	236.01	
Scope 3 (Business Travel and Office Pap	er) Emissions							
Office Paper	Packages	69,364.00	405.90	0.00	0.00	0.00	405.90	
Total Emissions, Calendar Year 2018			7,021.56	9.90	0.14	0.16	7,083	
Total Emissions, Calendar fear 2018			7,021.30	9.90	0.14	0.16	7,063	
Carbon Neutral or Offset Exempt			0.00	9.90	0.00	0.00	10	
Total for Offsets <sup>4</sup>			7,021.56	0.00	0.14	0.16	7,073	

- Each greenhouse gas has been converted to a standard measurement (ItCO<sub>2</sub>e) by multiplying its emissions by its global warming potential (GWP). The GWP of carbon dioxide (CO<sub>2</sub>) from both anthropogenic and biogenic sources is 1; methane (CH<sub>4</sub>) is 25, and nitrous oxide (N<sub>2</sub>O) is 298. The Totals for tCO2e are shown here rounded to the nearest whole metric tonne as only whole tonnes of tCO2e can be purchased for offsets.
- 2. Estimated data has been calculated based on the methods described in the Methodology Document.
- Reported data refers to consumption which has been directly billed to the organization.
- 4. The tCO2e value from the "Total for Offsets" line represents the quantity of offset purchases required to become carbon neutral.

# Part 1: CNAR Survey

# 1. General Information

Name: Adrian Pettyfer

Contact Email: apettyfer@sd43.bc.ca

Organization Name: School District 43 (Coquitlam)

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: Yes

Sustainability Coordinator: No Administrative Assistant: No

Facilities/Operations Manager/Coordinator: No

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?

Yes

If yes above, what are the main goals?: Reduce operating costs and our carbon footprint while improving our learning space through continual energy system improvements through better maintenance and more efficient replacement equipment.

- 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)

Continue to replace older less efficient energy systems as our funds permit.

Maintain our systems to work to their optimum efficiencies

Continue to reduce the amount of paper used through education and by using paperless solutions

Continue to educate and endorse better practices through behavioral campaigns

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

Continue to complete LED upgrades

Continue to replace older exterior lights with LED instead of re-lamping with non-efficient bulbs

Replace boiler plants with more efficient systems

Improve controls to enable better use of our systems

Continue to reduce paper by encouraging our schools to go paperless

Continue to engage our students and stakeholders in behavioral campaigns

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

With a portfolio of many schools, the goal is to identify the poor performers and work with maintenance to confirm which schools and systems would provide most cost effective reductions in energy consumption.

I. What % on average of your building portfolio has an energy audit completed each year (if any)?: 10

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

SD43 works with both Fortis and BC Hydro in achieving goals that satisfy the allotted targets. We find these targets to generally be in line with our funding abilities and assist the energy team to get the needed stakeholder buy in to keep the organization on track to reduce emissions.

I. What % on average of your building portfolio is retrofitted each year in the following categories (if any) - click <u>here</u> 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

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

I. If yes, have you included the associated emissions in your reporting?

No

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

N/A

- g) How many newly constructed buildings received at least LEED Gold certification in 2018:0
- I. How many newly constructed buildings did not receive LEED Gold certification?: 0
- ${\rm II.}$  Please explain why LEED Gold certification was not obtained.

We do not feel the cost for LEED certification is good use of our tax-based funds. This said we do strive to build our schools to a standard that is parallel to LEED Gold in almost all areas.

- 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)

We would like to move part of our fleet over to EV's however we have not found an electric vehicle that suits our current requirements. We are confident this will change and will put a vehicle charging plan in place over the next few years.

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

We will continue to assess alternatives to fossil fuel for our fleet and implement changes.

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): 1
Hydrogen fuel cell vehicle: 0
Natural gas/propane: 0
Gas/diesel vehicle: 74
```

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

We have not found an EV that meets our requirements.

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

```
level 2: 2
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: 2
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.)

In our New building designs we will include the provisions for EV charging and in some cases the installation of level 2 chargers

Part 1: CNAR Survey

# 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. 3/4 tonne pick-up truck, transport trucks)
- a) Light duty vehicles (LDVs)

Hybrid vehicles - HEV - (e.g., non "Plug In"- older Toyota Prius, Toyota Camry hybrid): 1

b) Light duty trucks (LDTs)

Gas/diesel: 29

c) Heavy duty vehicles (HDV)

Gas/diesel: 25

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

How much do you budget per LDV?: 0

How many LDVs do you plan to procure annually over the next 5 years?: 0

How much do you budget per LDT?: 0

How many LDTs do you plan to replace annually over the next 5 years?: 0

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

How many HDVs do you plan to replace annually over the next 5 years?: 0

# 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?

Yes

I. If yes, what are its goals?

To reduce the consumption of paper via an overall reduction in printing and photocopying and, by extension, reduce turnover of supplies, extend the lifetime of district printers and copiers, mitigate maintenance callouts to the supplier and to reduce overall costs to the District.

#### Part 1: CNAR Survey

- 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)

The District has engaged in a multi-aspect approach in the past 7 years in reducing its overall paper consumption. Some, but not all, the approaches are:

- Introducing and promoting the use of software solutions such as Adobe Acrobat (for the viewing, producing and management of e-documents) and Microsoft OneDrive (for storage and transfer of e-Documents).
- Introducing and promoting the use of hardware solutions such as upgrading of district computers and desktops to have larger and brighter display screens for more convenient and easier reading of e-documents.
- Making available to order only copy paper containing a minimum 30% recycled content.
- Engaging software to track the # of copies and printouts made per device and per user for analysis.
- Engaging in initiatives in directly tying paper usage to budgets.
- Reducing the # of printing and photocopying devices by reducing the number of smaller devices via elimination and consolidation to centralized, larger multifunction devices.

Over the next 5 years we will continue to refine and implement our approach described above

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

The approaches outlined above are continued to be refined and implemented for the foreseeable future.

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.

Purchasing services has worked closely with Maintenance to obtaining paper supplies such as paper towels, tissues and toilet paper that have a greater content of recycled material.