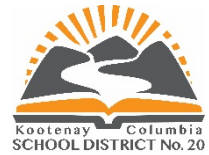


## **Declaration Statement**

This is the 2017 Carbon Neutral Action Report for School District No. 20 Kootenay Columbia. This Carbon Neutral Action Report summarizes our emissions profile, the amount of offsets purchased to reach net zero emissions and the actions we have taken to reduce our greenhouse gas emissions. As well, it contains a list of potential future options that may help us reduce Greenhouse gas emissions in the future.

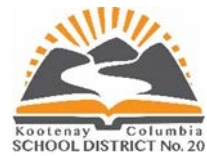
# OVERVIEW



## Emission Reduction Activities

The following is a list of actions taken toward carbon neutrality in 2017:

- Continued to install occupancy sensors in several rooms throughout the District.
- Continued to replace current bulbs with fluorescent and LED bulbs as they burn out.
- Continued to utilize power management software which shuts down computers outside of regular business hours.
- Continued to use server virtualization.
- Continued to use auto-sleep settings on computer monitors and CPUs.
- Continued to remove stand-alone printers, copiers, and/or fax machines and install multi-function devices.
- Continued to utilize auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices.
- Continued to replace computers with ENERGY STAR models during regular computer upgrades.
- Continued to replace appliances with ENERGY STAR models whenever new appliances are purchased.
- Continued to purchase paper with recycled content.
- Continued to replace vehicles in fleet with more efficient vehicles.
- Continued the implementation of computer lab replacement with laptops rather than desktops.
- Mechanical upgrades in three buildings within the District



## **Future Plans for the continual reduction of Greenhouse Gas Emissions**

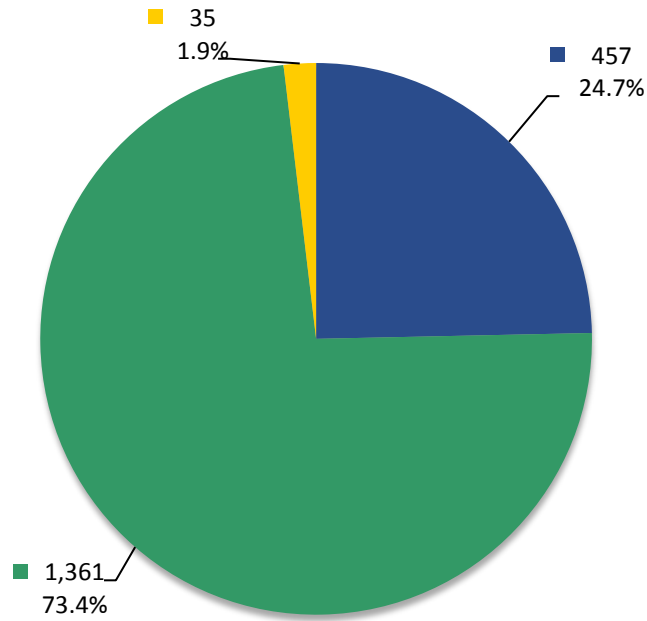
In 2017, we received capital funding to upgrade the mechanical systems at Stanley Humphries Secondary, Kinnaird Elementary and Waneta Bus Garage. The completion of these three mechanical upgrades are our greatest success stories for 2017 and we are once again looking forward to the energy savings and overall reduction of greenhouse gases due to the upgrading of older mechanical systems.

We have now received funding to replace the windows in Webster Elementary and that will surely be the success story of 2018 as we are replacing 90 single pane windows.

Other potential projects that continue to be considered within the buildings in our District include further window replacements, re-commissioning and rebalancing of newer mechanical systems, upgrades to DDC controls and the addition of CO2 sensors.

We will continue with all the smaller upgrades and changes that we have been working on in an effort to move our District closer to carbon neutrality in these challenging financial times.

## School District 20 - Kootenay-Columbia Greenhouse Gas Emissions by Source for the 2017 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 1,854**

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

### **Offsets Applied to Become Carbon Neutral in 2017 (Generated May 16, 2018 1:19 PM)**

Total offsets required: **1,468**. Total offset investment: **\$36,700**. Emissions which do not require offsets:

\*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.

\*\* Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions



## Emissions and Offsets Summary Table

<b>School District No. 20 (Kootenay Columbia) Greenhouse Gas Emissions and Offsets for 2017 (TCO2E)</b>	
<b>Greenhouse Gas Emissions in calendar year 2017:</b>	
Total Emissions	1854
Total Offsets	1468
<b>Adjustments to GHG Emissions Reported in Previous Years:</b>	
Total Emissions	0
Total Offsets	0
<b>Total Emissions for Offsets for the 2017 Reporting Year:</b>	
Total Offsets	1468

### Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No. 20 (Kootenay-Columbia) 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 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.

  
\_\_\_\_\_

2017 CNAR prepared by Director of Operations, Heather Simm

  
\_\_\_\_\_

2017 CNAR approved by Superintendent, Bill Ford

# Part 1: CNAR Survey

## 1. General Information

Name: Heather Simm

Contact Email: [hsimm@sd20.bc.ca](mailto:hsimm@sd20.bc.ca)

Organization Name: School District No. 20 (Kootenay-Columbia)

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)

None of the above

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

How many buildings were retrofitted?:

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

How many new "Green" buildings?:

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

In 2017 we did the following:

- LED lighting upgrades in JL Crowe, Kootenay Columbia Learning Centre, Fruitvale Elementary gym and the Castlegar Maintenance Bus Bay
- Boiler upgrade at Waneta Bus Garage
- Boiler upgrade at Stanley Humphries
- Boiler upgrade at Kinnaird Elementary
- RTU 1&2 replacement at Stanley Humphries

## 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

- Window replacement at Webster Elementary
- upgrade to DDC at Kinnaird Elementary

### b) Over the following 6-10 years

Unknown

## 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?:

## 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

Replace one more older gas vehicle with a newer gas vehicle

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

b) Over the following 6-10 years

Unknown but we have a continual cycle of replacing older vehicles with newer, more fuel efficient models.

## 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 an awareness campaign focused on reducing office paper use

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

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

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.

We have installed a program called 'Paper Cut' which allows the District to track the number of copies each individual or building is printing. We are using this as baseline information only at this point but could use it for a reduction strategy in the future.

## 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)

None of the above

### 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)

None of the above



## 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)

None of the above