

School District No. 20 Kootenay-Columbia

2016 Carbon Neutral Action Report

Declaration Statement

This is the 2016 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 2016:

- 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 reducing number of vehicles in fleet
- Continued to replace vehicles in fleet with more efficient vehicles.
- Continued to review and reduce where possible the number of kms driven on bus routes.
- Continued to review current Accounts Payable processes and investigating possibility of incorporating a more digital process to create efficiencies in both use of paper, time and information retrieval.
- Continued the reduction of interschool mail delivery from three times per week to one time per week (encourage use of digital rather than paper)
- Continued the implementation of computer lab replacement with laptops rather than desktops.

Future Plans for the continual reduction of Greenhouse Gas Emissions

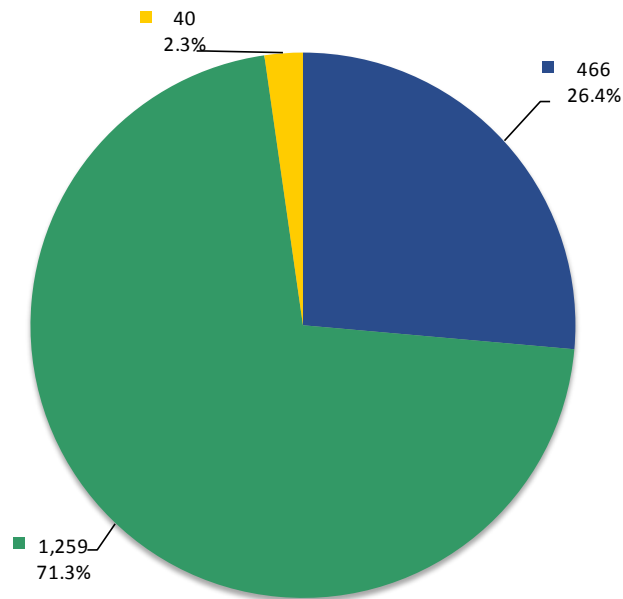
In 2016, we received capital funding to upgrade the mechanical systems at both Twin Rivers Elementary and Webster Elementary. The completion of these two mechanical upgrades are our greatest success stories for 2016 and we are once again looking forward to the energy savings and overall reduction of greenhouse gases due to the upgrading of older mechanical systems.

We have now received funding and are underway to complete the replacement of the remaining older mechanical systems in our School District. Once those projects are complete, we will be focusing on other areas to help reduce greenhouse gas emissions.

Other potential projects that continue to be considered within the buildings in our District include 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 2016 Calendar Year (tCO₂e*)**



Total Emissions: 1,765

- 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 2016 (Generated May 15, 2017 3:40 PM)

Total offsets required: **1,457**. Total offset investment: **\$36,425**. Emissions which do not require offsets: **307****

*Tonnes of carbon dioxide equivalent (tCO₂e) 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 from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

Emissions and Offsets Summary Table


School District No. 20 (Kootenay Columbia) Greenhouse Gas Emissions and Offsets for 2016 (TCO2E)	
Greenhouse Gas Emissions in calendar year 2016:	
Total Emissions	1765
Total Offsets	1457
Adjustments to GHG Emissions Reported in Previous Years:	
Total Emissions	82
Total Offsets	82
Total Emissions for Offsets for the 2016 Reporting Year:	
Total Offsets	1539

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 2016 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.



2016 CNAR prepared by Director of Operations, Heather Simm



2016 CNAR approved by Superintendent, Bill Ford

2016 Carbon Neutral Action Report Survey

Part One (external)

Contact Name(s):

Heather Simm

Organization Name:

School District No. 20 (Kootenay-Columbia)

Please select your sector:

- School District

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

During 2016, did your organization take any of the following actions to support emissions reductions from buildings?

Select all that apply

(No response)

Briefly describe your organization's plans to continue reducing emissions from its stationary sources in future years.

- Mechanical upgrade at Webster Elementary
- Mechanical upgrade at Twin Rivers Elementary
- Continued to install occupancy sensors in several rooms throughout the District.
- Continued to replace incandescent bulbs with CFL 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 with implementation of computer lab replacement with laptops rather than desktops.

During 2016, did your organization participate in utility-sponsored energy demand management program(s) (e.g. BC Hydro's Energy Management (Manager))?

No

If yes, please describe briefly:

(No response)

2) Mobile Sources (Vehicles, Off-road/Portable Equipment): Fuel Combustion.

During 2016, did your organization take any of the following actions to support emission reductions from its mobile sources?

Select all that apply

-
- Replaced existing vehicles with more fuel efficient vehicles (gas/diesel).: If yes, how many vehicles? 2
-

Briefly describe your organization's plans to continue reducing emissions from its mobile sources in future years.

*-Performed regular fleet maintenance to improve fuel-efficiency
-Continued to replace vehicles in fleet with more efficient vehicles.
-Continued to review and streamline travel for Operations Staff.
-Continue with reduced interschool mail delivery from three times per week to one time per week (encourage use of digital rather than paper)*

3) Supplies (Paper):

During 2016, did your organization take any of the following actions to support emissions reductions from paper supplies?

Select all that apply

(No response)

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

- Implemented 'Paper cut ' across the District. Will be tracking number of copies per employee with intent to reduce paper usage in the future.*
- Network printers all switched to default for double-sided printing*
- Continue to review of Accounts payable processes to see if we can reduce paper usage*
- Continue to purchase paper with recycled content.*

4) Other Sustainability Actions:

Business Travel:

During 2016, did your organization take any of the following actions to support emissions reductions from business travel?

Select all that apply

(No response)

Education Awareness:

During 2016, did your organization have any of the following programs or initiatives to support sustainability education and awareness?

Select all that apply

(No response)

Other Sustainability Actions:

During 2016, did your organization have any of the following programs or initiatives to support sustainability?

Select all that apply

-
- 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
-