

School District No. 20
Kootenay-Columbia
2015 Carbon Neutral Action Report

Declaration Statement

This is the 2015 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 2015:

- 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.
- Smart Driver training completed for all bus drivers.
- Continued to review and reduce where possible the number of kms driven on bus routes.
- Continued to review and streamline travel for Operations Staff.
- Continue 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

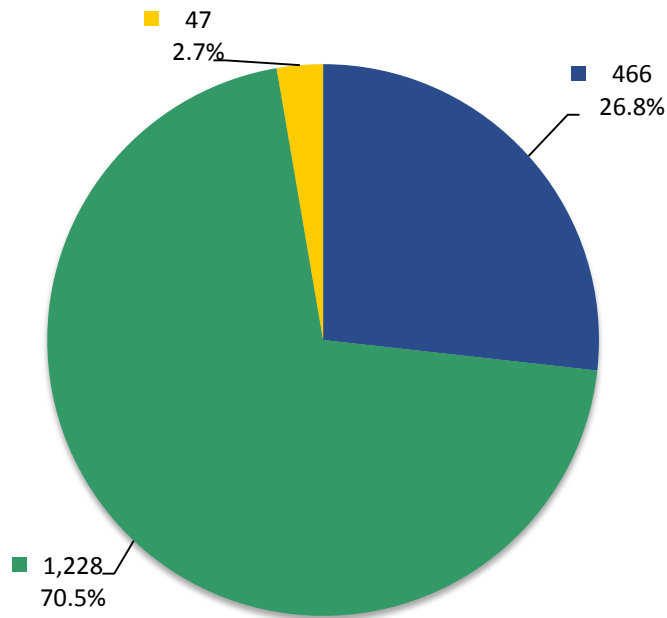
We have completed a study of all our mechanical systems and have developed a plan for replacement of older, less efficient mechanical systems throughout our District. We are planning to use AFG funds, hope to have some influx of CNCP funding as well as potentially obtain funding from the School Preservation Program to help with the massive costs of these upgrades.

In 2015, we received Routine Capital funding for an upgrade to the mechanical system at Kootenay Columbia Learning Centre. As well, we funded a mechanical upgrade at Fruitvale Elementary out of our AFG funding. These two mechanical upgrades are our greatest success stories for 2015 and we are looking forward to the energy savings and overall reduction of Greenhouse gases for both of those buildings.

Other potential projects that continue to be considered within the buildings in our District include further mechanical upgrades to our older systems, 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 2015 Calendar Year (tCO₂e*)



Total Emissions: 1,741

- 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 2015 (Generated May 10, 2016 2:28 PM)

Total offsets required: **1,475**. Total offset investment: **\$36,875**. Emissions which do not require offsets:

*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

Emissions and Offsets Summary Table

School District No. 20 (Kootenay Columbia)	
Greenhouse Gas Emissions and Offsets for 2015 (TCO2E)	
Greenhouse Gas Emissions in calendar year 2015:	
Total Emissions	1741
Total Offsets	1475
Adjustments to GHG Emissions Reported in Previous Years:	
Total Emissions	53
Total Offsets	2
Total Emissions for Offsets for the 2015 Reporting Year:	
Total Offsets	1477

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 2015 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.



2015 CNAR prepared by Director of Operations, Heather Simm



May 12, 2016

2015 CNAR approved by Superintendent, Greg Luterbach

2015 Carbon Neutral Action Report Survey

Organization Name:

School District No. 20 Kootenay-Columbia

Please select your sector:

- School District

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

Please indicate which actions your PSO took in 2015:

Have developed an overall strategy/plan to reduce energy use in your organization's buildings inventory:

No

If Yes, please describe:

(No response)

Undertook evaluations of building energy use:

No

Performed energy retrofits on existing buildings:

Yes

Built or are building new LEED Gold or other "Green" buildings:

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from buildings:

- Mechanical upgrade at Kootenay Columbia Learning Centre (
- Mechanical upgrade at Fruitvale Elementary School (boiler replacement with more efficient boilers)
- 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.*

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

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to support systematic reductions in fleet related emissions:

(e.g., program to convert fleet to renewable fuels)

No

If Yes, please describe:

(No response)

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

Yes

Replaced existing vehicles with hybrid or electric vehicles:

No

Took steps to drive less than previous years:

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion:

*-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):

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to facilitate a systematic reduction in paper-related emissions:

(e.g., policy to purchase 100% Recycled Content; default to double-sided printing)

No

If yes, please describe:

(No response)

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

Yes

If yes, please describe:

Starting a pilot project of 'Paper cut.' Will be tracking number of copies per employee with intent to reduce paper usage in the future.

Used only 100% recycled paper:

No

Used some recycled paper:

Yes

Used alternate source paper:

(e.g., bamboo, hemp, wheat etc.)

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from paper supplies:

*-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:

Please note that this section is optional

Business Travel

Created a low-carbon travel policy or travel reduction goal:

(low-carbon = lowest emission of greenhouse gas per kilometer per passenger)

No

Encouraged alternative travel for business:

(e.g. bicycles, public transit, walking)

No

Encouraged or allow telework/working from home:

No

Other:

(No response)

Education Awareness

Have a Green/Sustainability/Climate Action Team:

No

Supported green professional development:

(e.g. workshops, conferences, training)

No

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

No

Other:

(No response)

Adaptation Planning for Climate Risks

Have assessed whether increased frequency of extreme weather events and/or long term changes in climate will affect your organization's infrastructure, its employees and/or its clients:

No

Have incorporated these anticipated changes in climate into your organization's planning and decision making:

No

Other:

(No response)

Other Sustainability Actions

Established a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models:

No

Have put in place an operations policy/program to facilitate the reduction and diversion of building occupant waste stream from landfills or incineration facilities:

(e.g., composting, collection of plastics, batteries)

Yes

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase:

(e.g., office furniture, carpeting, etc.)

No

Incorporated lifecycle costing into new construction or renovations:

No

Please list any other sustainability actions your organization has taken not listed above:

-Full recycling program with co-mingled bins at all sites for paper, cardboard, plastic and glass.