#### **CNAR OVERVIEW TEMPLATE**

Title: 2014 Carbon Neutral Action Report

Organization name: School District No.5 (Southeast Kootenay)

**Declaration statement:** This *Carbon Neutral Action Report* for the period January 1<sup>st</sup> to December 31<sup>st</sup>, 2014 summarizes our emissions profile, the amount of offsets purchased to reach net zero emissions, the actions we have taken in 2014 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2015 and beyond.

By June 30 School District No.5 final Carbon Neutral Action Report will be posted to our website at www.sd5.bc.ca.

#### Overview:

#### **Carbon Neutral Action for 2014**

#### **Emissions Reduction Report**

This is the 2014 Carbon Neutral Action Report (CNAR) for School District No. 5. This report contains our 2014 emissions profile, offsets purchased, the actions we have taken in 2014 to reduce our GHG emissions and our plans to continue reducing emissions in 2015 and beyond.

By June 30, 2015, School District No. 5 final CNAR will be posted to our website at www.sd5.bc.ca.

School District No. 5 has continued to work towards reducing emissions this year in transportation, technology, electrical, HVAC, maintenance and plumbing and other school systems. As you will read, we have been working towards our goal of carbon neutrality. All of our departments are now in the mind set of reducing unnecessary emissions where they can; this is from removing inefficient printers to purchasing energy saving appliances. I believe our goal of working with staff and students to become more energy wise has paid off and will continue to pay off in the years to come. Some examples of what we have achieved this year are listed below.

**Transportation:** We have replaced older buses with newer ones. We are selling a sports bus thus reducing our fleet by 1. When replacing our maintenance vehicles we always look for the most energy efficient units that will work for our team.

**Technology:** Our new tech plan has started to be deployed in a number of our schools. With this plan we have lowered the number of computers in the converted schools by a large number. These computers are more energy efficient and have power saver set up through Group policy. The new tech plan allows our helpdesk to do most of the troubleshooting remotely, thereby reducing the amount of time and fuel the techs are using to travel to schools.

**Electrical:** Our Electricians have finished replacing the outside lights on most of our schools throughout the district. They have replaced the High energy wattage lights with more efficient LED lighting. They have removed most of the night lighting inside the school and are replacing them with LED pot lighting over the alarm key pads. We have started to replace some of the fluorescent lighting with LED lights. This year we will

be installing these fixtures in the halls of our larger school and monitoring the savings. If it proves to use less energy and is worth the savings we will move forward with this throughout the district.

**HVAC:** Our HVAC people have been busy replacing old and less efficient furnaces in a number of our schools. Our district has started to commission the schools as was planned and should have it finished up this year. We are currently replacing 3 Old RTUs with efficient condensing RTUs in 2 of our schools. This will be completed by early September. We are also Upgrading 1 of 2 schools to the newer Delta control systems allowing us to better control the HVAC system remotely. This alone will reduce travel time for our HVAC personal saving energy and time.

Maintenance: We continue to improve our buildings with better insulated door sweeps and insulation where possible. We are always looking at opportunities to better our building and will continue to do so in the future.

**Plumbing:** We have now completed all but 2 irrigation systems at the Cranbrook schools and supplied them with a remote system that allows us to control the water flow. This means that on rainy days the system will shut itself off. We also can control the amount of water remotely and if a break in the system occurs it will shut off as well. We will be installing this feature on all of our fields in the coming year thus reducing water usage and more consistent irrigation.

**RMES School:** Last summer we had smoke damage in 1 of our schools resulting in a complete renovation of the inside of the building. This allowed us to better insulate the school and change out all the lighting to newer more efficient lighting. We also put in more energy efficient Air Handling units in all the classrooms.

In conclusion School District No.5 is working to reduce our use of energy and save resources where possible. Last year was a unique year with the strike action taking place thus putting the district in a position where some of our plans were delayed. We are hoping in the future to become more energy efficient and reduce our consumption even more.

#### **Emissions and Offsets Summary Table:**

[The final values to complete this table will be available on your SMARTTool Home page by May 15, 2015.]

School District No.5 G	GHG Emissions and Offsets for 2014 (TCO2E)
GHG Emissions created in Calendar Year 2	<b>2014</b> (from SMARTTool Homepage):
Total Emissions (TCO2E)	3376
Total Offsets (TCO2E)	2880
Adjustments to GHG Emissions Reported	in Prior Years (from SMARTTool Homepage):
Total Emissions (TCO2E)	Nil

Total Offsets (TCO2E)	Nil
Total Emissions for Offset for the 2014 Re	porting Year (from SMARTTool Homepage)
Total Offsets (TCO2E)	2880

Executive sig	gn-off:	Page 1	May 29, 2015
Signature	Robert G	Norum	Secretary Treasurer.

Title

Name (please print)

# 2014 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

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School District No.5

#### **Actions Taken to Reduce Emissions**

### 1) Stationary Fuel Combustion, Electricity (Buildings):Indicate which actions were taken in 2014:

Performed energy retrofits on existing buildings

No

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

No

Undertook an evaluation of overall building energy use.

Yes

Please list any other actions taken to reduce emissions from Buildings:

We had a number of school commissioned and we are hoping to get most of them done in the coming year.

## 2) Mobile Fleet Combustion (Fleet and other vehicles):Indicate which actions were taken in 2014:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficent vehicles (gas/diesel) Yes
Replaced existing vehicles with hybrid or electric vehicles  No
Reduced the overall number of fleet vehicles Yes
Took steps to drive less than last year Yes
Please list any other actions taken to reduce emission from fleet:
We have implemented a Tech Plan that allowed us to remote into most computers in the district reducing the need to have Technicians to travel less throughout the district.
3) Supplies (Paper):Indicate which actions were taken in 2014: Used less paper than previous year
Yes
Used only 100% recycled paper
No
Used some recycled paper No

Used alternate source paper (Bamboo, hemp, etc.)
No

Please list any other actions taken to reduce emissions from paper use:

None

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#### **Actions Taken to Reduce Emissions - continued**

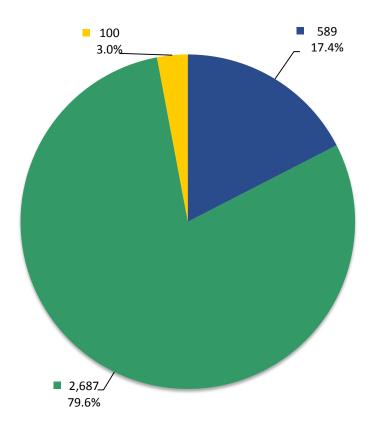
Explain how you plan to continue minimizing emissions in 2015 and future years:

We are replacing a Number of Roof Top Units with Condensing Units which are more efficient then the ones in place now. We are also commissioning more buildings so they run more efficiently. We will also be reducing the number of our vehicle fleet and replacing some older units with newer ones.

If you wish to list any other "sustainability actions" outside of buildings, fleet, paper and travel check "yes". This reporting is optional.

No

## School District 05 - Southeast Kootenay Greenhouse Gas Emissions by Source for the 2014 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 3,376** 

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 2014 (Generated June 23, 2015 10:55 AM)

Total offsets required: 2,880. Total offset investment: \$72,000. Emissions which do not require offsets: 495 \*\*

<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.

<sup>\*\*</sup> 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.