# School District No. 6 (Rocky Mountain) 2014 Carbon Neutral Action Report

#### **Executive Summary**

Rocky Mountain School District continues to focus on greenhouse gas emission reduction. The main source of the energy and greenhouse gas savings throughout the School District is the result of implementing building energy retrofit projects, and changes to the operation of buildings and vehicles. The School District's focus on environmental stewardship has been a key driver for success in reducing greenhouse gas emissions. This focus has led to the prioritization of staffing resources, and capital projects, as well as education programs focussing on energy reduction and environmental stewardship.

On-going benchmarking of energy performance of buildings, vehicles, and other energy consumption continues. Our Operations Department continually monitors energy consumption and focuses on energy reduction initiatives which ultimately reduce carbon emissions.

Paul Carriere Superintendent of Schools

### **2014 Greenhouse Gas Emissions**

A total of 1394 tonnes of greenhouse gas emissions were emitted by the school district during the 2014 calendar year, from all sources covered by the Greenhouse Gas Reduction Targets Act.

SD6 GHG Emissions and Offsets for 2014 (TCO2E)	
GHG Emissions created in calendar year 2014 (from SMARTTool Homepage)	
Total Emissions	1895
Total Emissions for Offsets	1395
Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)	
Total Emissions	0
Total Emissions for Offsets	0
Credit owing from PCT at end of 2013 reporting year (if applicable – from May 15 Invoice):	
Credit Owing	0
Total Emissions for Offsets for the 2013 Reporting Year (from Offset Invoice):	1395

#### **Emissions Reduction Activities**

### Actions Taken by the Rocky Mountain School District to Reduce Greenhouse Gas Emissions in 2014

Projects to reduce energy consumption and greenhouse gas emissions implemented in 2014 included:

- A control system audit including re-commissioning of an old pneumatic controls at Selkirk Secondary School in Kimberley. As a result of the information gathered during the audit, a DDC boiler and pump upgrade is now planned for summer 2015 to improve operational efficiency.
- Installation of a new HVAC system for the IE Shops at Selkirk Secondary improved ventilation which has eliminated the need to operate old inefficient systems.
- During 2014 schools continued to promote practices such as recycling, composting, operating greenhouses, and planting trees.

#### Plans to Continue Reducing Greenhouse Gas Emissions 2015 – 2016

Reducing energy consumption and greenhouse gas emissions will continue to be an important focus for the Rocky Mountain School District. Projects planned for the next three to five years show the potential for the School District to save energy costs, while significantly reducing greenhouse gas emissions and contributing becoming carbon neutral. Some projects planned for the next three to five years include:

- Upgrade exterior lighting to LED fixtures
- Replacement of old control system with a new DDC control system at Selkirk Secondary.
- Boiler upgrades at a two (2) elementary schools.
- DDC control upgrades and installations on various buildings.
- Gymnasium occupancy control of ventilation systems.
- Interior Lighting upgrades to LED and installation of occupancy controls throughout the District.
- Increased roofing insulation and wall insulation with cladding and roof upgrades at a number of buildings.
- Student and employee behavioural change education projects.

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

#### **Organization Name**

School District No. 6 (Rocky Mountain)

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

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

were taken in 2014:
Performed energy retrofits on existing buildings

Yes

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 contracted a Controls Company to audit and re-commission an old pneumatic control system at Selkirk Secondary School in Kimberley. The HVAC controls now operate the building more efficiently and the building is more comfortable for it's occupants.

## 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)  No
Replaced existing vehicles with hybrid or electric vehicles  No
Reduced the overall number of fleet vehicles  No
Took steps to drive less than last year No
Please list any other actions taken to reduce emission from fleet:
Drivers are provided annual training. A portion of this training focuses on how to operate a vehicle/bus efficiently.
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 Yes

Used alternate source paper (Bamboo, hemp, etc.)

No

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

We continue to utilize electronic data storage to minimize the necessity of printing documents.

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

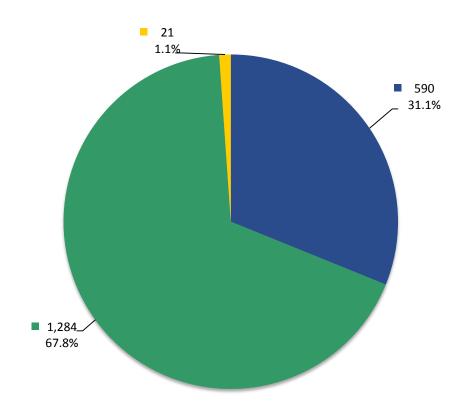
Explain how you plan to continue minimizing emissions in 2015 and future years:

We continue to monitor and optimize our HVAC controls and our occupied schedules to maximize system efficiency which ultimately reduces emissions. Old atmospheric gas appliances will be upgraded during life cycle replacements to higher efficient condensing units. We are presently planning LED exterior lighting upgrades for all our buildings. Planning has started to upgrade interior lighting to LED fixtures, this work will take a number of years to complete.

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 06 - Rocky Mountain Greenhouse Gas Emissions by Source for the 2014 Calendar Year (tCO<sub>2</sub>e\*)



#### **Total Emissions: 1,895**

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

#### Offsets Applied to Become Carbon Neutral in 2014 (Generated June 23, 2015 10:59 AM)

Supplies (Paper)

Total offsets required: 1,395. Total offset investment: \$34,875. Emissions which do not require offsets: 500 \*\*

<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.