



## School District No. 6 (Rocky Mountain)

### 2016 Carbon Neutral Action Report

**Declaration statement:** This Carbon Neutral Action Report for the period January 1<sup>st</sup>, 2016 to December 31<sup>st</sup>, 2016 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2016 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2017 and beyond.

#### 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.

A handwritten signature in blue ink, appearing to read 'Paul Carriere'.

Paul Carriere  
Superintendent of Schools



2016 Greenhouse Gas Emissions

A total of 1323 tonnes of greenhouse gas emissions were emitted by the School District during the 2016 calendar year, from all sources covered by the Greenhouse Gas Reduction Targets Act.

506 GHG Emissions and Offsets for 2016 (TC02E)	
GHG Emissions created in calendar year 2016 (from SMARTTool Homepage)	
Total Emissions	1884
Total Emissions for Offsets	1323
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 2015 reporting year:	
Credit Owing	0
Total Emissions for Offsets for the 2016 Reporting Year (from Offset Invoice):	1323



## Emissions Reduction Activities

### **Actions Taken by the Rocky Mountain School District to Reduce Greenhouse Gas Emissions in 2016**

Projects to reduce energy consumption and greenhouse gas emissions implemented in 2016 included:

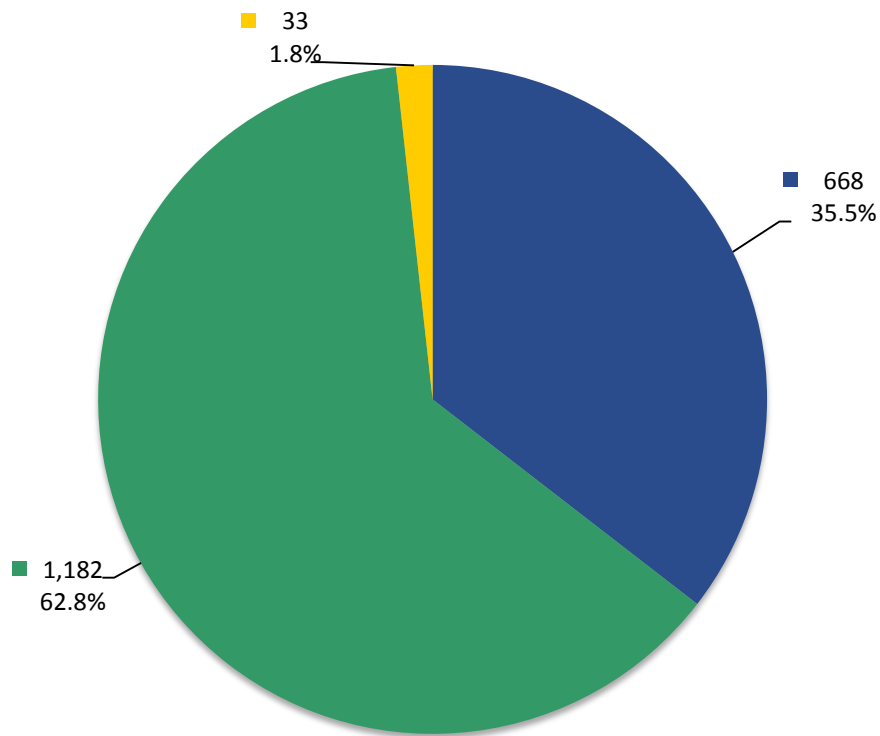
- At David Thompson Secondary School the computerized HVAC controls were upgraded to improve scheduling abilities which has enhanced human comfort control and has improved operational efficiency.
- During 2016 a Lighting Engineering firm was commissioned to audit interior and exterior lighting at all School District facilities. As a result of the audit, a plan was developed to upgrade exterior lighting with LED fixtures at all facilities. A pilot project was also established at one Elementary School to upgrade interior lighting to LED fixtures.

### **Plans to Continue Reducing Greenhouse Gas Emissions 2017 - 2018**

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 to becoming carbon neutral. Some projects planned for the next three to five years include:

- Upgrade exterior lighting at three high schools to LED fixtures
- Upgrade all interior lighting fixtures to LED complete with dimmers and occupancy controls at one elementary school.
- Boiler upgrades at one (1) high school and at two (2) elementary schools.
- DOC control upgrades and installations on various buildings.
- Gymnasium occupancy control of ventilation systems.
- Increased roofing insulation and wall insulation with cladding and roof upgrades at a number of buildings.
- Investigation into the viability of fuel switching from propane fired heating plants to electricity.
- Student and employee behavioural change education projects.

## School District 06 - Rocky Mountain Greenhouse Gas Emissions by Source for the 2016 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 1,884**

- 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 4:17 PM)**

Total offsets required: **1,323**. Total offset investment: **\$33,075**. Emissions which do not require offsets: **561** \*\*

\*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 from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

# 2016 Carbon Neutral Action Report Survey

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Part One (external)

Contact Name(s):

*Steve Jackson, Director of Operations*

Organization Name:

*School District No. 6 (Rocky Mountain)*

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

- Performed energy retrofits of the organization's buildings.: If yes, how many buildings? 3

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

*Exterior lighting at our three high schools are being retrofitted to LED. One Elementary school interior lighting is undergoing a retrofit to LED fixtures. Funding requests to upgrade atmospheric boilers to condensing has been submitted, other HVAC systems will be upgraded to high efficiency. Plans to refresh software on all DDC systems complete with optimization programming to enhance energy savings.*

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

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- Took steps to drive less than previous years.
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Briefly describe your organization's plans to continue reducing emissions from its mobile sources in future years.

*Our School District continues to encourage car pooling and will be continuing to enhance our video conferencing abilities to reduce the need to travel for meetings.*

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.

*Our District continues to encourage electronic document management and is implementing a new electronic document management system.*



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

- Green, Sustainability or Climate Action Team
- Support for professional development on sustainability (e.g. workshops, conferences, training)
- Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials

Other Sustainability Actions:

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

Select all that apply

- Green procurement standards for goods (e.g., office furniture, etc.)
- Other, please describe briefly: Our School District implemented an Energy Conservation policy in 2010 and continues to follow that policy.