

School District No. 6 (Rocky Mountain) 2015 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

2015 Greenhouse Gas Emissions

A total of 1330 tonnes of greenhouse gas emissions were emitted by the School District during the 2015 calendar year, from all sources covered by the Greenhouse Gas Reduction Targets Act.

| SD6 GHG Emissions and Offsets for 2015 (TCO2E) | | | | | | | |
|---|------|--|--|--|--|--|--|
| | | | | | | | |
| GHG Emissions created in calendar year 2015 (from SMARTTool Homepage) | | | | | | | |
| | | | | | | | |
| Total Emissions | 1898 | | | | | | |
| Total Emissions for Offsets | 1330 | | | | | | |
| 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 2014 reporting year: | | | | | | | |
| | | | | | | | |
| Credit Owing | 0 | | | | | | |
| Total Emissions for Offsets for the 2015 Reporting Year (from Offset Invoice): | 1330 | | | | | | |

Emissions Reduction Activities

Actions Taken by the Rocky Mountain School District to Reduce Greenhouse Gas Emissions in 2015

Projects to reduce energy consumption and greenhouse gas emissions implemented in 2015 included:

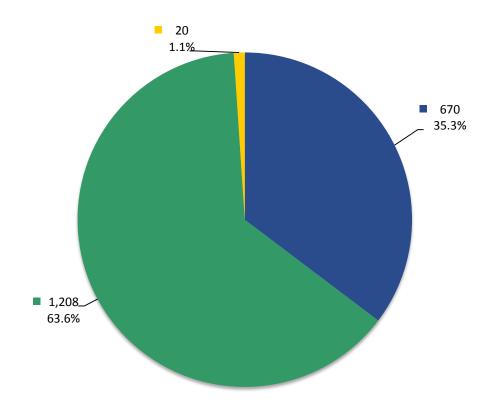
- As a result of the information gathered during a HVAC audit of Selkirk Secondary School
 in 2014, a DDC boiler and pump upgrade was installed in the summer of 2015 which has
 enhanced human comfort control and has improved operational efficiency.
- During 2015 schools continued to promote practices such as recycling, composting, operating greenhouses, and planting trees.

Plans to Continue Reducing Greenhouse Gas Emissions 2016 - 2017

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 to LED fixtures
- 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.

School District 06 - Rocky Mountain Greenhouse Gas Emissions by Source for the 2015 Calendar Year (tCO₂e*)



Total Emissions: 1,898

- 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 25, 2016 9:48 AM)

Total offsets required: 1,330. Total offset investment: \$33,250. Emissions which do not require offsets: 568 **

^{*}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.

2015 Carbon Neutral Action Report Survey

| Organization Name: |
|--|
| School District No. 6 (Rocky Mountain) |
| 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: |
| Yes |
| If Yes, please describe: |
| (No response) |
| Undertook evaluations of building energy use: |
| Yes |
| Performed energy retrofits on existing buildings: |
| Yes |
| Built or are building new LEED Gold or other "Green" buildings: |
| Yes |
| Please list any other actions, programs or initiatives that your organization has introduced that |

(No response)

If yes, please describe:

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| 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) |
| Yes |
| If Yes, please describe: |
| We have implemented a "no idling" policy for all School District vehicles. Drivers have been given training improve fuel efficiency by using driving practices. |
| Replaced existing vehicles with more fuel efficient vehicles (gas/diesel): |
| No |
| Replaced existing vehicles with hybrid or electric vehicles: |
| No |
| Took steps to drive less than previous years: Yes |
| Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion: |
| Our Board of Education and School District Personnel utilize Video Conference equipment between our major centers (Golden, Invermere and Kimberley) to reduce the need to travel for meetings. |
| 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 |

Default to double-sided printing throughout the School District.

| Have put in place an operations policy/program to facilitate behavioural changes from paper use: |
|--|
| (e.g. awareness campaign to reduce paper use): |
| No |
| If yes, please describe: |
| (No response) |
| 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:

All our schools, offices and maintenance buildings have active paper recycling programs.

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| 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) |
| Yes |
| Encouraged alternative travel for business: |
| (e.g. bicycles, public transit, walking) |
| No |
| Encouraged or allow telework/working from home: |
| No |
| Other: |
| Video conference equipment has been installed in our Board office in Invermere and zone offices in Golden and Kimberley. |
| Education Awareness |
| Have a Green/Sustainability/Climate Action Team: |
| Yes |
| Supported green professional development: |
| (e.g. workshops, conferences, training) |
| Yes |

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

Yes

Other:

Kootenay Boundary Environmental Education Initiative - The School Districts in Kootenay Boundary are working together to enhance environmental education across the six School Districts. Exploring and implementing sustainability initiatives through collaboration

with each other.

Adaptation Planning for Climate Risks

| Have | assessed | whether | increased | frequency | of extreme | weather | events | and/or l | ong term | changes |
|---------|-----------|-----------|------------|--------------|---------------|----------|----------|-----------|------------|---------|
| in clir | nate will | affect yo | ur organiz | zation's int | frastructure, | its empl | loyees a | ınd/or it | s clients: | U |
| | | 3 | C | | <i>'</i> | | , | | | |

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:

Yes

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.)

Yes

Incorporated lifecycle costing into new construction or renovations:

Yes

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

(No response)