

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

### Executive Summary

Rocky Mountain School District Board of Education while developing the District's Educational focus for the next 5 years included a major focus on Environmental Stewardship. The goal is to reduce the environmental impact of all our practices through-out the School District and to meet the legislative requirements of the Greenhouse Gas Reductions Targets Act (GGRTA 2007) by developing a District wide Sustainability Plan. September 2009 is the target date to have the District's Sustainability Plan in place. Starting in October 2009 it is planned to communicate the Environmental Sustainability Plan to staff, students and partners through a wide variety of mediums. We plan to review this plan annually every September .

The Sustainability Plan will build on best practices and facility upgrades that were in place in Rocky Mountain School District prior to 2008 and the requirement to be carbon neutral. The following list is some examples of initiatives that were undertaken for Energy Savings and Environmental reasons prior to 2008:

- Most Facilities have been upgraded to new Energy Efficient T8 Lighting
- Gymnasiums have had Indirect Lighting systems replaced with more efficient Fluorescent Lighting Systems.
- All Exit Lights through-out the District were replaced with LED fixtures funded through a BC Hydro program.
- All Facilities are equipped with Energy Management controls, most are DDC some smaller facilities are equipped with Electronic Thermostats.
- High Efficient Furnaces have been installed.
- Custodial staff have all had Power Smart Training
- Maintenance staff have had Energy Management teams that focus on Energy Saving Projects.
- In 2002, a new Middle School was built, is one of 4 Green Building Pilot Projects in the Province. Which included surpassing the Model National Energy Code by 50% with items such as Building Orientation, Light shelves, Daylight Sensors, Occupancy Controls, High Efficient Boilers.
- Computer shut down programs have been implemented.
- The first Carbon Neutral Computer Lab in Canada was installed at Lindsay Park Elementary in 2007.
- Building Envelope upgrades, new efficient windows, improved exterior wall insulation, air barriers, exterior finishes, additional roof insulation included in re-roofing projects to improve thermal performance.
- Preventative Maintenance programs to keep equipment operating at peak performance.
- School Recycle Programs
- Neighbourhood walk to School Programs (Walking School Bus)

In summary, we believe that by taking a holistic approach to Sustainability, and focusing best practices for the Environment we will ultimately reduce Greenhouse gases and as a result, Staff and Students will develop life long habits for the betterment of our environment.

<b>Objectives</b>	<p>An additional focus of our Board of Education is to the "Employer of Choice", creating a culture that focuses on Quality Education and Sustainable Best Practices we hope to recognize as being progressive and a rewarding place to work. Retaining and attracting great employees.</p> <p>As Educational Leaders in the Communities of our School District, we feel it is our Social Responsibility to lead the way to greenhouse gas reduction and to demonstrate healthily environmental practices. The result will benefit students, staff and our Community at large.</p>
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**Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008**

<b>Overview</b>	<p>Overview of Rocky Mountain School District's Actions taken to Reduce Greenhouse Gas Emissions in 2008</p> <p>Sustainability and Energy Savings continue to be a focus for our School District. During 2008 Schools continued to promote practices such as recycling, operating greenhouses and planting trees while at a District level the Operations Department engaged Consultants to perform lighting audits at our 3 High Schools, this was funded through BC Hydro Power smart, Energy Savings Opportunity Fund. The Senior Management of the School District met with BC Hydro representatives for the purposes of an Energy Management Assessment. One outcome of this assessment will result in the School District hiring an Energy Manager, who will be tasked with the day to day efforts of meeting the requirements of the Energy Management System Action plan as well as managing efforts to reduce greenhouse gases. The Energy Manager will lead and enhance the District's Sustainability plan.</p> <p>A Boiler upgrade design for Golden Secondary was initiated during 2008, the intent is to upgrade standard efficient Boilers to new high efficient condensing boilers. The installation is planned for summer of 2009.</p> <p>David Thompson Secondary School roof replacement design began, the re-roofing project will result in doubling the roof insulation of approximately 7900 sq meters of roof. Construction is scheduled to begin in April 2009.</p> <p>A majority of our washrooms were upgraded during 2008 with auto flush controls to conserve water.</p> <p>Operations Department initiated an Organizational restructuring which will result in the significant decrease in travel requirements.</p>
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**1.1 Mobile Fuel Combustion**

<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Provided driver training to reduce fuel use	Complete		SmartDriver for School Bus - NR Can
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Complete		Preventative Maintenance Program on Fleet this is on-going practice
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	In Progress		Signs posted at some facilities, all drivers encouraged to reduce unnecessary idling
Encouraged car pooling in fleet vehicles	Complete		Staff is encouraged to car pool
Established travel reduction goals	In Progress		use of video and teleconference for some meetings

## 1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Turned off lights in unused rooms	in progress		
Installed multi-function devices (and removed stand-alone printers/faxes)	in progress		Board Office Copiers replaced Printers
Installed motion activated lights	in progress		
Implemented server virtualization	in progress		
Utilized desk-top power management settings on computer	in progress		
Undertaken building energy audit at LOCATION(s)	in progress		Selkirk Secondary, David Thompson Secondary and Golden Secondary
Initiated or completed a building energy retrofit	in progress		
Other:	complete		Design and Construction drawings for Boiler Upgrade at Golden Secondary. Standard efficient Boilers upgraded to High Efficient
	complete		Design and Construction drawings for David Thompson Secondary Roof Replacement which will result in doubling the insulation on the roof.
	in progress		Commissioned Consultants to perform Lighting Audits on Selkirk, Golden and David Thompson Secondary Schools.

## 1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to hold paperless meetings	in progress		Board Meetings are all Paperless.
Developed document library (online and one printed copy) for large documents	in progress		Use of School District Web Site to house Board Policies, Health and Safety Manual
Other:	complete		Initiated Paperless Board Meetings

## 1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Trained staff in the use of Live Meeting (or other desktop collaborative software)	complete		Use Elluminate Live
	complete		Board schedules teleconference Board and Committee meetings to reduce travel requirements
	complete		Departments utilize teleconferencing to reduce travel.

## 1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	in progress		School based
Provided conservation education	in progress		School based

Supported Green Teams (resources)	in progress	Provided Custodial staff microfiber cleaning tools therefore reduction of chemical use. Less transportation, less freight.
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### 1.6 Sustainability Actions (others)

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Took water conservation measures – low flow showers or toilets, fix leaks	complete		Installed Auto Flush Valves
Improved recycling measures	in progress		Schools have recycling programs, Cardboard recycle bins located at most School District Facilities.
Purchased green cleaning products	in progress		Testing products in various facilities

### Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

<b>Overview</b>	<p>Rocky Mountain School District Future Plans to continue to Reduce Greenhouse Gas Emissions 2009-2011</p> <p>An Energy Manager will be hired in the Spring of 2009. The focus for this individual will be to lead and refine the District's Sustainability Plan. Working with Operations staff new opportunities for further Energy Savings will be identified. Funding will be secured and greenhouse gas reduction projects will be implemented. The Energy Manager will also work with all Staff and encourage behaviour changes that will result in further greenhouse gas reductions.</p> <p>Specific projects proceeding in 2009 that will reduce greenhouse gas emissions are:  David Thompson Secondary School Roof Replacement - Insulation will be doubled over the entire 7900 sq meter roof  Golden Secondary School - New High Efficient Boilers will be installed to replace existing Standard Efficient Boilers  Marysville Elementary School- half of the roof area will be re-roofed incorporating new roof deck insulation which will result in Improved thermal characteristics therefore reducing the heating load.</p> <p>Future projects currently under consideration:  Golden Secondary Lighting Upgrade  David Thompson Secondary Lighting Upgrade  Various Building Envelope Upgrades  Ventilation Optimization various Buildings - Occupancy Controls</p>
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### 2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	Planned			
Provide driver training to reduce fuel use	In Progress		Continue with SMARTDRIVER Training	
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In Progress		Continue to encourage Bus and Maintenance Drivers to reduce unnecessary idling.	
Encourage car pooling in fleet vehicles	In Progress			

Other:	In Progress	Buses are currently being upgraded to reduce Emissions.
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## 2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use	Planned			
Turn off lights in unused rooms	In Progress			
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress			
Install motion activated lights	In Progress			
Implement server virtualization	In Progress			
Undertake building energy audit at LOCATION(s)	In Progress		Lighting Audits 3 High Schools	

## 2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
	in progress		Green Cleaning Supplies	

## 2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Train staff in the use of Live Meeting (or other desktop collaborative software)	In Progress		Eliminate Live is utilized and will continue to be used.	
Install Video Conferencing facilities	In Progress		Board Meetings, Committee meetings, staff meetings all to reduce travel requirements	
Other:	In Progress		Telephone Operations meetings	

## 2.5 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide climate change education	Planned			
Provide conservation education	Planned			
Develop Green Teams	In Progress			
Support Green Teams (resources)	In Progress			
Provide green tips	Planned			
Support professional development	In Progress			

## 2.6 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Take water conservation measures – low flow showers or toilets, fix leaks	Planned			
Reduce/replace bottled water with filtered or refrigerated water	in Progress			
Use re-usable dishes	Completed			

## ADDITIONAL ACTIONS TAKEN OR PLANNED

	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
	Planned		Identify Greenhouse Gas Reduction Opportunities.	
	Planned		Secure Funding to Implement new Opportunities.	
	Planned		Complete Projects	