

**Carbon Neutral Action Report  
School District No. 75 (Mission)**

**Objectives**

Additional purposes of the above noted actions are as follows: development of staff awareness and knowledge; increasing efficiencies of delivery systems (Mechanical & Electrical); raising awareness levels with respect to sustainability issues amongst students, staff and the community in general and providing cost effective delivery of services to all School District buildings.

**Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008**

**Overview**

The School District has sought to gain a comprehensive perspective of the ways in which the daily operations have direct impact on the discharge of Greenhouse Gases (GHG). Through the assessment and audit process the district intends to identify where investment of effort and capital will maximize return on elimination and reduction of CO2(e). Using the accumulated data an Environmental Sustainability Committee will be established with local stakeholder groups and an action plan with recommendations will be developed. The intent will be to identify those areas where the School District can make the greatest strides towards achieving carbon neutrality by 2012.

**1.1 Mobile Fuel Combustion**

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Use of bio-diesel for bus fleet	* all school buses have the capacity to use bio-diesel and discussions are ongoing to find a supplier
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress	Service vehicles / bus fleet service and preventative maintenance logs	A system of regular service, inspections and records is being established for implementation
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	Complete	Self regulating amongst service staff - casual monitoring by management staff	
Installation of block heaters on buses + affiliated software management	complete	Assess fuel consumption of base year versus 2008.	Through the computer management bus idling has been reduced from 10-15 minutes down to 3-5 minutes with the block heaters. Engines now automatically shut off after a set period of time.

**1.2 Stationary fuel combustion and electricity**

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Undertaken workstation tune-ups to help staff understand what they can do to reduce personal energy use	In progress	No formal assessment strategy at this time	Reminders communicated to all schools. Future planning could include staff workstation challenges
Replaced # computers with EnergyStar models	In progress	Total replacement of computers with Energy Star rated models	With the greening of the district's technology plan the intent will be to use EnergyStar models throughout the ongoing replacement process.
Asked staff to close blinds daily	In progress	Reduced gas and electricity consumption	Reminders communicated to all schools
Turned off lights in unused rooms	In progress	Reduced gas and electricity consumption	Reminders communicated to all schools
Replaced Refrigerators (EnergyStar rated appliance)	In progress	Reduced gas and electricity consumption	Replacement practice
Replaced other appliances (with EnergyStar rated appliance)	In progress	Reduced gas and electricity consumption	Replacement practice
Installed multi-function devices (and removed stand alone printers/faxes)	In progress	Reduced replacement costs for minimized stand alone devices as well as a measurable reduction of gas and electricity consumption	While some actions have been taken in this regard there is no consistency in applying the procedure at this time. The intent is to utilize photocopiers as networked, depleting printers as the contracted machines expire.

Replaced standard bulbs with CFLs	In progress	Electrical conservation	Gradual transition as replacement is required of existing bulbs
Undertaken lighting retrofit	Complete		The entire district's facilities have been converted to energy efficient lighting fixtures.
Implemented server virtualization	In progress	Electrical conservation	
Utilized desk-top power management settings on computer	Complete	Reduced electrical consumption	Software now installed in all desktop workstations to automatically shut down computers each day.
Initiated corporate computer shut-down/wake-up for maintenance	Complete	Reduced electrical consumption	Incorporated function of installed auto shut-off software.
Unplugged unused equipment	In progress		
Applied for LEED existing building rating	In progress	Sustainability and energy efficiency	New construction/retrofit has applied LEED standards (Silver)
Undertaken building energy audit at LOCATION(s)	In progress	Prioritization of planned actions and district sustainability funds based on demonstrated need.	District wide audit of mechanical and electrical systems (Mech.- Stantech / Elec. - Quantum Lighting)
Recommissioned DDC systems to optimize energy efficiency	Complete	Reduced fuel consumption	Repair, reprogramming and reconfiguration of Digital Damper Controls
Boiler replacement	In progress	Reduced fuel consumption	Replaced older, inefficient boiler with high efficiency boiler at School Board Offices

### 1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Restructured a process to use less paper	In progress	Reduced paper purchases and reduction in amount of paper sent to recycling	All processes and system operations are currently being reviewed to develop improved, eco-friendly procedures
<b>Actions on non-paper related supplies:</b>			
Chose "Green" items from Distribution Centre	Complete	Complete conversion to Eco-friendly supplies for custodial supplies	Custodial cleaning supplies recently converted to ecologically friendly products
Encouraged re-use of furniture and equipment	In progress		Warehousing system developed to re-use furniture and millwork across the school district whenever possible.

### 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)	In progress		Staff training and awareness is an ongoing initiative.

### 1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In progress	Hiring of Energy Manager and implementation of Energy Management Assessment recommendations	Major focus for 2009
Provided conservation education	In progress	Implementation of Energy Management Assessment recommendations	Major focus for 2009
Supported professional development	In progress		Where possible, employees have been supported to participate in environmental sustainability professional development

### 1.6 Sustainability Actions (others)

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Reduced/replaced bottled water with filtered or refrigerated water	In progress	Recycling container reduction of plastic water bottles	Some facilities have converted from bottled products to in-line, filtered water distribution
Improved recycling measures	In progress	Reduction of container lifts by waste removal company	Pilot project initiated to recycle compostable, plastics, cardboard and paper at one secondary school.
Purchased green cleaning products	In progress		Previously noted custodial cleaning product system conversion
Supported sustainable procurement practices	In progress		Procurement done as a consortium with other public education agencies.

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

**Overview**

- Many initiatives are in process and include, but are not limited, to the following:
- \* formally establishing a Sustainability Environmental Advisory Committee to develop and provide systemic recommendations
  - \* in conjunction with B.C. Hydro, hiring an Energy Manager for the School District
  - \* in conjunction with Terasen Gas, reviewing facility mechanical systems to determine propriety of conversion to geothermal heating
  - \* working collaboratively with the local municipal governments to find ways of reducing energy consumption and maximizing GHG reduction efficiencies
  - \* implementation of workplace policies and procedures to maximize efficiencies and promotion of employee education and involvement in "greening" initiatives.

**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	Fleet conversion	Future vehicle replacement to have bio-diesel capacity	Ongoing
Provide driver training to reduce fuel use	Planned			Fall, 2009
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Planned	Reduced service fleet fuel consumption through individual tracking of fuel usage.	New, mandatory fleet service vehicle inspection schedule to be implemented	2009 and onward
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress	Ongoing enforcement		

**2.2 Stationary Fuel Combustion (including electricity)**

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # computers with EnergyStar models	In progress			
Ask staff to close blinds daily	In progress			
Turn off lights in unused rooms	In progress			
Install multi-function devices (and remove stand-alone printers/faxes)	In progress			
Replace standard bulbs with CFLs	In progress			
Undertake lighting retrofit	In progress			
Implement server virtualization	In progress		This is already a target for the Information Technologists currently employed	Ongoing
Initiate corporate computer shut-down/wake-up for maintenance	In progress			
Unplug unused equipment	In progress			
Apply for LEED existing building rating	In progress			
Initiate or complete a building energy retrofit	In progress		Currently under review with Terasen gas under the terms of a joint Memorandum of Understanding	Ongoing
	In progress	* Staffing of the position	* Hiring of Energy Manager-Core work to be employee education and energy consumption reduction through staff awareness	June, 2009

<b>2.3 Supplies</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Commit to use 30% recycled paper	In progress	Measurement of paper purchases through supplier	Attaining purchasing consortium agreement on paper contract and % of recycled materials	2009
Initiate automatic double sided printing	In progress	All capable printers set to duplex	Set network printer defaults to duplex use	2009
Use collaborative software to edit on-line	In progress	Implementation of Exchange across the district	Staff education needed to implement systemic usage of editing capacity	Ongoing
Re-use non-confidential scrap paper	In progress		This has been a sustainability practice in many schools for many years	2009
Restructure a process to use less paper	In progress		This will be an initiative of the Environmental Sustainability Committee	2009
<b>Actions on non-paper related supplies:</b>				
Choose "Green" items from Distribution Centre	In progress		Purchasing practices	Ongoing
Encourage re-use of furniture and equipment	In progress		Budget dictates this as a necessity	Ongoing
<b>2.4 Travel</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Train staff in the use of Live Meeting (or other desktop collaborative software)	In progress		Once the facilities are on an equal technology footing, professional development around "green" meeting strategies will be delivered	2010
<b>2.5 Employee Engagement</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Provide climate change education	In progress		Management communications to all facilities contain "green" tips	Ongoing
Provide conservation education	In progress			Commencing in the Fall of 2009- role of Energy Manager
Provide green tips	In progress			
Support professional development	In progress		October Professional Development Day will bring non-instructional staff together to educate and brainstorm new initiatives	October, 2009
<b>2.6 Sustainability Actions (others)</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Take water conservation measures – low flow showers or toilets, fix leaks	In progress			Ongoing
Reduce/replace bottled water with filtered or refrigerated water	In progress			Ongoing
Improve recycling measures	In progress		Expand comprehensive recycling program to all secondary schools	2009
Support composting	In progress		Working with municipality to place compostables in municipal repository	2009
Purchase green cleaning products	In progress	All cleaning products are biodegradable	As funds allow	Ongoing
Support sustainable procurement practices	In progress		Purchasing Agent acting on this as procurements are made.	Ongoing
<b>ADDITIONAL ACTIONS TAKEN OR PLANNED</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
			As a component of annual school growth plans two schools have identified environmental initiatives as their Social responsibility goal for the 2009-10 school year. More schools will be encouraged and supported to follow suit.	2009