

Carbon Neutral Action Report School District No. 61 (Greater Victoria)

Executive Summary

The Board of Education No. 61 (Greater Victoria) has established a Board supported District wide Climate Action Control Committee with representation from Trustees, Senior Administration, School Principals, Facilities Staff, Support Staff, PAC Representatives and Students. In addition, the adoption of an Environmental Climate Change policy that commits to integrating environmentally sustainable considerations into all of our business decisions ensuring staff, students and parents are fully aware of our policy, actions and results. The District presently ensures suppliers and clients are aware of our policy and encourages them to adopt sound sustainable environmental management practices and to review, report and continually strive to improve our environmental sustainability performance. Furthermore, the Board has established an Energy Savings Program that includes lighting retrofits, fuel conversions, heating control upgrades, water conservation and building occupant education. Finally, the Board is actively upgrading heating plants and heating controls through its Annual Facilities Grant (AFG).

Objectives

- Strive to meet provincial carbon neutrality by 2010.
- Support the development of school based student/staff energy conservation, sustainability initiatives and develop performance rewards.
- Continue to offer energy and environmental educational opportunities for students.
- Continue to expand staff and student awareness of energy and resource conservation.
- Currently preparing a joint Waste Management tender in conjunction with other major public service groups in the Victoria area.
- The objective being to develop a waste management program that supports both Provincial and local government's mandate by identifying and implementing best practice methods of recycling, composting and paper use reduction.

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

Overview

- * The school district is a BC Hydro Power Smart Partner, we have engaged an Energy manager.
- * We have participated in the Destination Conservation student education program.
- * Fuel Conversions from fuel oil to natural gas at Richmond, Cloverdale, and Frank Hobbs schools.
- * High efficiency condensing boiler plant installed at Frank Hobbs.
- * New DDC heating controls at Northridge, and Vic West schools.
- * Lighting retrofits at Willows and EagleView schools.
- * PSECA applications submitted for 3 schools with heating plant upgrades and Solar wall installations (approved March 13, 2009).
- * New thermo pane windows installed at Gordon Head, Glanford, Campus View and Doncaster schools.
- * New low flow toilets installed at Macaulay and View Royal schools.

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		2 Units Complete. Replaced older Ford Van with newer GM unit. Traded in older John Deere tractor with newer efficient unit.
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress		Fleet maintenance program in place and always making an effort to keep vehicles tuned and running efficiently.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	In Progress		District wide interest at schools with signage etc. messages to parents about anti idling. We have requested our staff to reduce idling of vehicles.
Initiate use of Bio-diesel fuel for diesel fleet.	In Progress		Fleet diesel vehicles using 10% bio diesel fuel.
1.2 Stationary fuel combustion and electricity			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Undertaken Monitor turn-off challenge	In progress		Ongoing energy awareness campaign
Replaced # computers with EnergyStar models	Completed	Replaced 799 desktops and 56 laptops with Energy Star rating	Any new computing equipment is specified as Energy Star rated.
Turned off lights in unused rooms	In progress		Ongoing energy awareness campaign
Replaced Refrigerators (EnergyStar rated appliance)	Completed	Replaced 5 Refrigerators and All Refrigerator replaced with Energy Star models	Any appliance replaced are done so with Energy Star products
Replaced other appliances (with EnergyStar rated appliance)	Completed	Replaced 7 Dishwashers, 2 Freezers and 1 washing machine with Energy Star models	As above
Installed multi-function devices (and removed stand-alone printers/faxes)	In progress	Installed 35 MFD to date and 13 more are scheduled for July 1, 2009	New multi function photocopiers being installed around the district.
Replaced standard bulbs with CFLs	In progress		Lighting upgrade program (35 schools completed)
Installed motion activated lights	In progress		Lighting upgrade program (35 schools completed)
Undertaken lighting retrofit	In progress		Lighting upgrade program (35 schools completed)
Implemented server virtualization	In progress		District I.T. team currently surveying district server opportunities
Utilized desk-top power management settings on computer	In progress		
Unplugged unused equipment	In progress		Ongoing energy awareness campaign
Applied for LEED existing building rating	Completed		The district participated in the LEED pilot for schools program with 10 participating schools. No LEED EB certifications being sought at this time.
Undertaken building energy audit at LOCATION(s)	Completed		Hillcrest school as part of LEED program above.

Initiated or completed a building energy retrofit	Complete	Frank Hobbs school new efficient boiler plant and controls installed (converted from oil to nat. gas)
Student education programs.	In progress	The district is active with educational programs offered from BC Hydro , Destination Conservation., Sierra Club Sustainable Schools Project, and programs from the CRD.

1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	Completed	7 boxes	Offering 40% in 2009
Committed to use 100% recycled paper	Completed	75 boxes (tested in MFD)	Contracting for 100%
Actions on non-paper related supplies:			
Purchased cradle to cradle goods	Completed	Purchased MFD to replace analog equipment	
Encouraged re-use of furniture and equipment	In process		Reuse of furniture items in district storage

1.4. Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided conservation education	Completed		Custodial staff have participated in energy awareness training from BC Hydro. Trades staff have taken the NRCAN Spot the Energy Savings workshops. Selected staff have attended DDC controls training.
	In progress		The district is developing an awareness website to showcase successes , current programs, and future opportunities for energy conservation and awareness.

1.5. 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		Annual program with the CRD for replacing old toilets with 6 litre low flow units, so far 5 schools completed. All schools have Water Matrix urinal valve sensors. Waterless are installed at some sites.
Improved recycling measures	In Progress		Schools and district expanding current recycle programs
Supported composting	In Progress		Many schools developing composting programs
Purchased green cleaning products	In Progress	Tender issued for green cleaning products tested and meeting ECO-Logo implementing June 30, 2009.	Custodial green cleaning products being used
Used green (low-e paints)	In Progress		District practice is to use low VOC latex paints only
Supported sustainable procurement practices	In Progress		Tenders and contracts include requirements for sustainable practices and products from suppliers

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

Overview

The Board of Education No. 61 (Greater Victoria) will continue to work to provide energy management support for the district Energy Manager, we will continue to implement energy efficiency capital upgrades to our facilities with heating controls, heating plant upgrades, lighting upgrades, window replacements, awareness campaigns for staff and students, and educational opportunities.

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		Any replacement vehicles will be energy efficient units.	
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress		Continue to develop efficiency of fleet through regular servicing and tuning etc.	Annual program
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	Planned		Expand the awareness and expectation of staff to reduce idling of district vehicles.	Annual program
Encourage car pooling in fleet vehicles	Planned		Where practical this procedure will occur	Annual program

2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertaken Monitor turn-off challenge	In Progress		Ongoing energy awareness program	Annual Program
Replace # computers with EnergyStar models	In Progress		Purchase only Energy Star rated computers and monitors	
Turn off lights in unused rooms	In Progress		Ongoing energy awareness program	Annual Program
Replace Refrigerators (EnergyStar rated appliance)	In Progress	All appliances that have Energy Star rating are standard		
Replace other appliances (with EnergyStar rated appliance)	In Progress	All appliances that have Energy Star rating are standard		
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress	All schools and departments on the replacement schedule will be replaced with MFD	Reduces the need for stand alone printers, faxes and scanners	Annual Program
Replace standard bulbs with CFLs	In Progress		Ongoing energy awareness program	Annual Program
Install motion activated lights	In Progress		Ongoing energy awareness program	Annual Program
Undertake lighting retrofit	In Progress		Ongoing energy awareness program	Annual Program
Implement server virtualization	Planned		Continued district server review and incentive opportunity with BC Hydro programs.	Dec 31 2009
Unplug unused equipment	In Progress			annual program
Initiate or complete a building energy retrofit	Planned		DDC control upgrades at Rockheights, Macaulay, and Margaret Jenkins	Dec. 31 2009

2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Commit to use 30% recycled paper	In progress	Minimum standard 40% recycled		01-Jul-09
Commit to use 100% recycled paper	In progress	Minimum standard 100% recycled		2 years
Initiate automatic double sided printing	In progress	Recommend double sided printing	Reduce paper use	1 year
Restructure a process to use less paper	Planned		Expand the installation of electric hand driers in schools to eliminate paper towel products.	Annual program

Actions on non-paper related supplies:				
Purchase cradle to cradle goods	In progress	Purchase MDF that are made from recycled product		
Choose "Green" items from Distribution Centre	In progress	Green Office products	New contract will offer green products	01-Jul-09
Encourage re-use of furniture and equipment	In progress		Reuse of used items from storage	annual Program
Other	In progress	Contract	Shredded paper is recycled	

2.4. Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide conservation education	In progress		Various student programs from BC Hydro, Destination Conservation. Employee awareness briefings, NRCAN training opportunities.	Annual program
Hold contests to change behaviour/make pledge	In progress		Website development will offer school based challenges and contests.	Dec 31 2009

2.5. 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	In Progress		Continued retrofit program of toilet replacements with low flow units.	annual
Improve recycling measures	In Progress	Expansion of the waste streams	Expansion of recycle programs at schools	annual
Support composting	In Progress		Expansion of composting programs at schools	annual
Use re-usable dishes	In Progress		Many district meetings reflecting this topic	annual
Purchase green cleaning products	In Progress	Bio Degradable Garbage bags	Expansion of district program	annual
Use green (low-e paints)	In Progress		As per district practice	annual