Carbon Neutral Action Report School District No. 52 (Prince Rupert)

Executive Summary

School District No. 52 is a district of 2500 students and between January 2008 and December 2008 educated its students in eight elementary schools, two secondary schools, two village schools, one distributed learning storefront school and is supported by a maintenance building, an aboriginal education administration building and a board office. Six trustees at large and one rural trustee represent School District No. 52's communities. Of its 16 sites, 13 are owned, 2 are band owned and one is leased. The average age of the owned buildings is 41 years. With funding being scarce and aging facilities, the District looks to carbon neutral projects that deliver savings directly or indirectly by reducing maintenance on its facilities and vehicles. While there have been efforts made during 2008 to reduce greenhouse gas emissions the District will look to the future to change culture and provide leadership to students, staff and community to explore more ideas and initiatives to reduce greenhouse gases in everyday life in schools, in addition to the continued efforts to address our facilities.

Objectives

School District NO. 52's key actions taken during 2008 toward carbon neutrality were PowerSmart lighting retrofits, boiler upgrades, vehicle replacements and school closures. School District No. 52's efforts, in terms of carbon neutrality efforts, are aimed at addressing aging buildings with higher efficiency repairs, replacement or closure. For example the District is working diligently to take advantage of fossil fuel reduction projects like lighting retrofits and HVAC system upgrades including boilers, where there is either project sharing funding, a reasonable payback period or straight savings to the District.

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

Overview

- Power smart Lighting Retrofits
- Boiler replacements
- Vehicle Replacement
- Closure of two schools

1.1	Mobil	e Fuel	Com	bustion
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Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE	Complete		replaced 1 gasoline bus with a 2008 diesel bus
EFFICIENT VEHICLE/Hybrid			and replaced 1 1989 gasoline cargo van with a
			2008 V6 Chevrolet Express van
nitiated new fleet maintenance program (could include –	In Progress		Service fleet vehicles twice annually. Because of
changing filters, checking tire pressure, regular check-			small geographic areas in district, fleet is serviced
ups)			before required km's to ensure efficiency rather
			than waiting for required km's

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Other:	In Progress		Employees travelling to the same in district or
			out of district meetings are encouraged to
			carpool rather than take individual vehicles
1.2 Stationary fuel combustion and elec	ctricity		
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced Refrigerators (EnergyStar rated appliance)	Complete		Replaced two fridges at two sites with EnergyStar
			fridges
Replaced other appliances (with EnergyStar rated	Complete		Replaced two stoves at two sites with EnergyStar
appliance)			Stove and replaced one dishwasher at one site
			with EnergyStar dishwasher
Installed multi-function devices (and removed stand-alone	In Progress		Replaced district photocopier fleet with
printers/faxes)	, and the second		refurbished copiers with network boards that
			serve as central office printers with double sided
			feature in all sites
			Removing stand alone printers as they
			breakdown
Replaced standard bulbs with CFLs	Complete		
Undertaken lighting retrofit	Complete		Power Smart lighting retrofit at two sites
Undertaken building energy audit at LOCATION(s)	In Progress		Lighting at some sites
Other:	Complete		Replaced one 600,000 BTU boiler with two-
			300,000 BTU boilers
	Complete		Closed two schools effective June 30, 2008
			reducing overall district square metreage by 4250
			square metres
	Complete		Unit ventilator cleaning at three sites for more
			efficient heat use and distribution
	Complete		Consolidated three school meal kitchens to one
			centralized commercial kitchen
	In Progress		CRT computer monitor replacements with energy
			efficient flat LCD monitors

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Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 100% recycled paper	Complete		Bulk paper order by central office
Committed to hold paperless meetings	In Progress		Board of Education Meetings: agendas printed
			only, not attachments. Three out of seven
			trustees meet bring laptops to monthly meeting
			versus paper agendas and attachments
Re-used non-confidential scrap paper	In Progress		
Jsed laptops/tablets	Complete		Replaced one stationary computer lab with two
			mobile laptop labs at one site
Actions on non-paper related supplies:			
Purchased cradle to cradle goods	Complete		School meal supplies delivery to one central
			kitchen
Chose "Green" items from Distribution Centre	In Progress		Implemented 100% bio-degradable garbage bags
			as centralized custodial supply purchase
Encouraged re-use of furniture and equipment	In Progress		Made supplies, furniture and equipment from
			two closed schools available to other schools,
			community organizations and public at large.
1.4 Employee Engagement			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Developed Green Teams	In Progress		"Green Games" participant at one site
1.5 Sustainability Actions (others)			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Took water conservation measures – low flow showers or	Complete	Reduced water usage	Low flush toilets installed by municipality at one
oilets, fix leaks			site and installed faucets on timers at two sites

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

Overview

Upon signing the Climate Action Charter School District No. 52 will continue with past reductions such as PowerSmart Lighting Retrofits, vehicle replacement and boiler replacements. In addition the district has undergone a long range facilities plan which may involve future school closure and/or new building construction. New future projects will include: incentives and raised awareness for students and employees, for further project identification, LEEDS certification on new building, building envelope project through BC Housing on existing building and measurement practices for analysing success of carbon neutrality efforts

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		Replacement of one V8 1994 GMC Cargo Van all one 2003 Sunfire car with two 4 cylinder Dodge Calibre hatchbacks	
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress		Service fleet vehicles twice annually. Because small geographic areas in district, fleet is service before required km's to ensure efficiency rather than waiting for required km's	ed
Establish anti-idling behaviour change program (e.g.	Planned			Sep-09

signs, stickers, messages)	Planned			3ep-09
2.2 Stationary Fuel Combustion (including	ng 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			Sep-09
Turn off lights in unused rooms	Planned			Sep-09
Replace Refrigerators (EnergyStar rated appliance)	Planned		As replacement requires	2008 - 2011
Replace other appliances (with EnergyStar rated appliance)	Planned		As replacement requires	2009 - 2011
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress		Individual stand alone printers not replaced without IT Department review when broken	2009 - 2011
Install motion activated lights	Planned		Administration buildings (three sites)	2010
Undertake lighting retrofit	In Progress		As part of BC Housing Building Envelope Program project at one site and other sites through	July 2009 - 2011
Implement server virtualization	Planned			March -
Apply for LEED existing building rating	Planned		Potential new middle school as a result of long range facilities plan	2011
Undertake building energy audit at LOCATION(s)	Planned		HVAC upgrade projects at one site	2010
Other:	Planned		Building envelope program at one site to upgrade/repair/replace bay windows with energy	Jul-09
	Planned		Boiler replacement at one site	2010

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	Planned	Possible further school closure based on long	2011
		range facilities plan	
	Planned	Replace HVAC motors with energy efficient	Apr-09
		motors as required as part of regular	
		maintenance	
2.3 Supplies			
Action	Action Planned	Outcome/Performance Measure Notes Clarifying Action Taken	Timeframe
Commit to hold paperless meetings	Planned	Board of Education Meetings: agendas printed	2010
		only, not attachments. Seven out of seven	
		trustees meet bring laptops to monthly meeting	
		versus paper agendas and attachments	
Develop document library (online and one printed copy) for large documents	Planned	Website development	2009-2011
Re-use non-confidential scrap paper	In Progress		On-going
Use laptops/tablets	Planned	Replacement of one stationary computer lab	Sep-09
		with two mobile labs at second site	•
Restructure a process to use less paper	Planned	Electronic document management software for	Jul-09
reconstruction approach to doc recorpance.	riailileu	use in education administration building to	Jui-0 <i>9</i>
2.4 Employee Engagement		use in education administration building to	
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Action	Action Planned	Outcome/Performance Measure Notes Clarifying Action Taken	Timeframe
	Action Planned Planned	Raise awareness at all sites through incentives,	Timeframe 2007 - 2011
Action			
Action	Planned	Raise awareness at all sites through incentives,	
Action Provide climate change education		Raise awareness at all sites through incentives,	
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Action Provide climate change education Provide conservation education Hold contests to change behaviour/make pledge	Planned Planned Planned	Raise awareness at all sites through incentives,	
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