

Carbon Neutral Action Report School District 70 (Alberni)

Executive Summary

SD 70 continues to embrace energy conservation measures and is dedicated to reducing carbon emissions. We constantly maintain environmental consciousness as buildings are renovated and retrofitted. We continue to complete many upgrades to lighting, mechanical and control systems. We are actively planning for the replacement of the largest most inefficient school in the District with a smaller LEEDS Gold certified high school. Students and staff have taken many initiatives: reducing waste output, actively recycling, composting, purchasing green products, undertaking energy challenges, turning off & unplugging unneeded equipment & lights. We continue to upgrade our school bus fleet replacing 2 15 year old buses. The environmental effects & benefits of decisions and practises are being considered more & more often.

Objectives

The education of students will increase the awareness of this issue as well and ensure future generations will continue to embrace conservation and the importance of reducing greenhouse emissions. The reduction of energy use and greenhouse emissions will be added as one of the key decision criteria used to evaluate both large & small projects and purchases.

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

Overview

Replacing old hot water boilers with 2 smaller high efficiency condensing boilers/facility, upgrading all DDC systems for the HVAC units, replacing metal halide fixtures in gymnasiums and shop areas with high output t5 fluorescent fixtures, installing occupancy sensors in gymnasiums and classrooms

1.1 Mobile Fuel Combustion

Instituted the "no-idling" protocol for all transportation department school buses

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided driver training to reduce fuel use	In Progress	Drivers more aware of the importance of driving defensively and not exceeding the speed limit. A savings in diesel fuel is a direct benefit.	Initiated Phase I of the "Thinking Driver" Training Program for the Transportation Dept.
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Complete	All Transportation Dept. school buses serviced monthly	Initiated a new "Post Trip" & "Pre-Trip" Protocol for the Transportation Bus Fleet
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	Complete	Should realize a saving in diesel fuel of 3% to 5%/ annum	Established anti-idling program for Transportation Bus Fleet

1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # computers with EnergyStar models	In Progress	Reduced electrical consumption	As part of computer renewal
Turned off lights in unused rooms	In Progress	Reduced electrical consumption	
Installed multi-function devices (and removed stand-alone printers/faxes)	In progress	Reduced electrical consumption	Done when equipment replaced
Replaced standard bulbs with CFLs	In Progress	Realized a significant hydro cost saving/month	Replaced 90% of incandescent bulbs
Undertaken lighting retrofit	In Progress	Realized a significant hydro cost saving/month	All t12 fluorescent tubes replaced with t8 tubes
Undertaken building energy audit at LOCATION(s)	In Progress	Comprehensive energy savings	As part of BC Hydro Power Smart program
Upgraded DCC Controls	In Progress	Reduced energy usage	Ongoing as resources permit

1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to hold paperless meetings	In progress	Reduced paper consumption	Board Meeting attachments accessed electronically
Used collaborative software to edit on-line	In progress	Reduced paper consumption	
Actions on non-paper related supplies:			
Chose "Green" items from Distribution Centre	In progress	Especially cleaning products	In all custodial operations
Encouraged re-use of furniture and equipment	In progress	Very little or no replacement	throughout all district operations

1.4 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In progress	Not measureable	Numerous initiatives at every school
Held contests to change behaviour/make pledges	In progress	Reduced energy consumption	Reduced month to month electrical & natural gas consumption
Developed Green Teams	In progress	Improved staff & student education	Numerous initiatives at every school - recycling, composting, energy reductions & awareness
District wide recycling	Complete	reduced paper in landfill	Coordinated at district level

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	In progress		Done as part of washroom renovations
Ran dishwasher only when full	Complete		
Reduced/replaced bottled water with filtered or refrigerated water	In progress		Using municipal water rather than bottled
Improved recycling measures	In progress		Monitor recycling contractor
Supported composting	In progress		Being done at some schools
Used re-usable dishes	In progress		
Purchased green cleaning products	In progress		Currently purchase green cleaning products where practicable
Used green (low-e paints)	In progress		Purchased low-e paints for all exterior and interior painting projects

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

2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide driver training to reduce fuel use	in progress		Phase II of the "Thinking Driver" training program for the Transportation Dept.	
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	planned		Will be installing the "Zonar Electronic" monitoring system on Transportation School Bus fleet	
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	in progress			
Replace 2 aged 1994 84 passenger buses with 500,000 km with 2009 buses	planned			

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			
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned			
Undertaken Monitor turn-off challenge	Planned			
Replace # computers with EnergyStar models	Planned			
Replace Refrigerators (EnergyStar rated appliance)	Planned			
Install multi-function devices (and remove stand-alone printers/faxes)	Planned			
Install motion activated lights	Planned			
Utilize desk-top power management settings on computer	Planned			
	planned		Will be initiating a BC Hydro Energy Audit in 2009	
	Planned		Will be replacing old hot water boilers with 94% high efficiency boilers in two facilities in 2009 and in two more facilities in 2010.	
	In Progress	Replacement of a 60 year old 15,000 sq m building with a new 10,500 sq m Leeds Gold certified building in 2011	Have upgraded the DDC system in 3 schools in 2009 and will be upgrading the DDC system in two more schools in 2010	

2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Change document template margins	Planned			
Develop document library (online and one printed copy) for large documents	Planned			
Re-use non-confidential scrap paper	Planned			

2.4 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
	In Progress		Purchase low-e paints for all interior and exterior painting projects	