

**Carbon Neutral Action Report
School District No. 53 (Okanagan Similkameen)**

Executive Summary

School District No 53 has been very proactive in various programs that would reduce GHG emissions or energy reductions and responsible education practices with staff through-out the years. Since 2004 some of the directions have included: Transportation, 1) Reduction of bus routes, 2) Reduction of stops, Emission retrofits for diesel buses, Driver training, No idling program, Replacement of older fleet vehicles.

Maintenance, 1) All facilities have digital data controls, DDC, All facilities retrofitted with T8/T5 lighting, AC units replaced with heat pumps, Exterior lighting controls, Window treatments for heat loss/heat gain, Weather-strip replacements, Low flow toilets, Auto flush urinals, Computer software for computer shut down, LED exit lights , Occupancy sensors, Computer replacements, Recycle programs, Irrigation software and monitors for water reduction, Reduction of cleaning chemicals and efficient cleaning methods , New projects utilizing LEED design.

As we are an education institution, we the district feel that the staff have an obligation to be leaders in promoting initiatives that contribute to a cleaner and healthier environment.

Objectives

The district is to encourage and foster programs that achieve reductions of GHG. Education is a focal point for our resources, including staff and students.

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

Overview

As many programs have been initiated prior to Jan 1/08 , the programs have to be monitored and evaluated on an on going basis, e.g. Anti idling program. Since Jan,2008 we have completed the last of our facilities to have DDC controls installed, reduced bus stops, and have LEED Gold design in our capital high school project. Replacement roof top units are to be heat pump heating first, gas back up. Education of staff to inform them of the benefits of our climate change initiatives.

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	Replaced 9 older vehicles. Reduced fuel consumption	Purchased newer vehicles that have smaller engines and better km/100L
Provided driver training to reduce fuel use	Complete	Bus drivers (20) and maintenance (9) trained in methods of driving techniques that reduce fuel consumption	Lead hands trained in Drive Smart Program. Workshops to drivers.

Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Complete	All vehicles (35) are under our 5000 KM maintenance program. Less major repairs and better mileage is expected.	A complete inspection is performed every 5000 Km.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	Complete	Established anti - idling program, informed all drivers of benefits to not idling. Reduced fuel consumption.	Workshops to drivers , signage at all facilities
Encouraged car pooling in fleet vehicles	Complete	Multiple trades people that must attend a facility encouraged to use one vehicle	Lead hands schedule workloads, Purchased crew cab for grounds personnel.
Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts			Installed bicycle racks at all schools
Established travel reduction goals	In Progress		Will be reviewing and reducing travel budgets, bus runs reduced

1.2 Stationary fuel combustion and electricity

	All facilities replaced with T8 fixtures or T5 fixtures, DDC in all Facilities, replacements of old roof top units to hybrid heat/ cool units.		
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		Training and education ongoing
Undertaken Monitor turn-off challenge	In Progress		Education ongoing
Replaced # computers with EnergyStar models	Complete	Improved energy consumption	Approx. 400 computers and monitors replaced with new energy star units.
Encouraged staff to use stairs	Complete	All elevators are not used by staff.	Elevators are keyed only for handicapped staff or students.
Replaced Refrigerators (EnergyStar rated appliance)	ongoing	Improved energy consumption	As equipment replaced
Replaced other appliances (with EnergyStar rated appliance)	ongoing	Improved Energy consumption	As equipment replaced
Installed multi-function devices (and removed stand-alone printers/faxes)	Complete	Improved Energy consumption	we are 100% MFD
Replaced standard bulbs with CFLs	Complete	9 schools, retrofitted T8/T5 lighting, Reduction of energy	Fortis retrofit program,
Installed motion activated lights	In Progress	9 schools, retrofitted T8/T5 lighting, Reduction of energy	Fortis retrofit program,
Undertaken lighting retrofit	Complete	9 schools, retrofitted T8/T5 lighting, Reduction of energy	Fortis retrofit program
Implemented server virtualization	Complete		District tech plan funded upgrade
Utilized desk-top power management settings on computer	Complete		Software controlled
Initiated corporate computer shut-down/wake-up for maintenance	Complete		All software based
Unplugged unused equipment	In Progress		Educate staff
Applied for LEED existing building rating	In Progress		Any future work to be completed to Led Gold standard

1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	In Progress		
Initiated automatic double sided printing	In Progress	Board Office set as default, Reduction of paper	
Changed document template margins	In Progress		
Committed to hold paperless meetings	In Progress	Less use of paper	90% of staff have laptops, encourage use.
Developed document library (online and one printed copy) for large documents	In Progress	Paper usage	Many documents online - policy, health and safety, employee forms
Re-used non-confidential scrap paper	In Progress		Encourage and educate staff
Used laptops/tablets	Complete		Tech plan development
Restructured a process to use less paper	In Progress		Education
Actions on non-paper related supplies:			
Purchased cradle to cradle goods	In Progress		
Chose "Green" items from Distribution Centre	In Progress		Educate staff
Encouraged re-use of furniture and equipment	In Progress		Utilize in other facilities

1.4 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In progress		
Provided conservation education	In progress		
Supported professional development	In Progress	Knowledge and attitudinal change	staff have attended various workshops

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	Less water consumption	Installing dual flush toilets and waterless urinals
Improved recycling measures	In Progress	Less landfill waste	Continued education - established programs are in place
Purchased green cleaning products	In Progress	Less landfill waste	Education
Used green (low-e paints)	In Progress		District initiative years ago
Supported sustainable procurement practices	In Progress		Work with suppliers and other school districts

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

Overview

Education will be our main focus to encourage reduction of GHG. Be an active participant in achieving goals and objectives of our schools and school district. To evaluate the costs and benefits of reductions in the program initiatives. To encourage energy efficiencies and innovative ideas.

2.1 Mobile Fuel Combustion

Utilize future technological improvements to result in lower costs and greenhouse gas emissions.

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Replaced 9 older vehicles. Reduced fuel consumption.	Purchased newer vehicles that have smaller engines and better km/100L	On going
Provide driver training to reduce fuel use	In Progress	Bus drivers (20) and maintenance (9) trained in methods of driving techniques that reduce fuel consumption	Leadhands trained in Drive Smart Program. Workshops to drivers.	On going
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress	All vehicles (35) are under our 5000 KM maintenance program. Less major repairs and better mileage is expected.	A complete inspection is performed every 5000 Km.	On going
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In Progress	Established anti - idling program, informed all drivers of benefits to not idling. Reduced fuel consumption.	Workshops to drivers , signage at all facilities	On going
Encourage car pooling in fleet vehicles	In Progress			
Establish travel reduction goals	In Progress			

2.2 Stationary Fuel Combustion (including electricity)

We have digitized all of our heating/cooling systems to turn on/off automatically to save on energy. Continued use of technological improvement, motion sensors on lighting etc

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	In Progress			
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	In Progress		Education of staff	On Going
Undertaken Monitor turn-off challenge	In Progress		Education of staff	
Replace # computers with EnergyStar models	In Progress		Continue replacement with energy star models as needed.	On Going
Encourage staff to use stairs	In Progress			
Turn off lights in unused rooms	In Progress		Computer controlled and education of staff re day use.	On Going
Replace Refrigerators (EnergyStar rated appliance)	In Progress			

Replace other appliances (with EnergyStar rated appliance)	In progress	Energy consumption reduction	As equipment replaced	On Going
Replace standard bulbs with CFLs	In Progress			
Install motion activated lights	In Progress		Second part of our retrofit program	On Going
Undertake lighting retrofit	In Progress			
Implement server virtualization	In Progress			
Utilize desk-top power management settings on computer	In Progress			
Initiate corporate computer shut-down/wake-up for maintenance	Completed			
Unplug unused equipment	In Progress		On going education and reminders	On Going
Apply for LEED existing building rating	In Progress		All new work to LEED standard	On Going
Undertake building energy audit at LOCATION(s)	In Progress		Engage a consultant - possibly 2010	

2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Initiate automatic double sided printing	In Progress			On Going
Commit to hold paperless meetings	In Progress	less paper	Paperless board meetings as much as possible	On Going
Develop document library (online and one printed copy) for large documents	In Progress	Less paper usage	Most Forms, policies, H&S manuals on line	On Going
Re-use non-confidential scrap paper			Encouragement/budget implications	
Use laptops/tablets	In Progress		Tech plan, will continue practice	On Going
Restructure a process to use less paper	In Progress			On Going
Actions on non-paper related supplies:				
Encourage re-use of furniture and equipment	In Progress	Less energy	Redeployment of underutilized multi functional devices to higher utilization locations	On Going

2.4 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide climate change education	In Progress		Education and awareness amongst staff - make it a topic of discussion	On Going
Provide conservation education	In Progress		Staff meetings/AO meetings/Pro D	On Going
Provide green tips	In Progress		As awareness increases so will knowledge - include on school newsletters	On Going
Support professional development	In Progress			On Going

2.5 Sustainability Actions (others)

A 25 acre parcel of play area will be irrigated with reclaimed water.

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Take water conservation measures – low flow showers or toilets, fix leaks	In Progress	Less water consumption community may have to accept non green field for their activities	Installing dual flush toilets and waterless urinals, High school to use reclaimed water for irrigation.	2009-11
Run dishwasher only when full	In progress	Less water consumption	Education	On Going
Reduce/replace bottled water with filtered or refrigerated water	In progress			
Improve recycling measures	In Progress	Monitor recycling for improvement	Continue and improve practice	On Going
Support composting	In Progress			On Going
Use re-usable dishes	In Progress			On Going
Purchase green cleaning products	In Progress			On Going
Support sustainable procurement practices	In Progress			On Going