

Carbon Neutral Action Report School District No. 22 (Vernon)

Executive Summary

Our district promotes anti-idling, with 'anti-idling' signs and encourages recycling, composting and waste reduction programs expansion in schools and sites. In 2008 the Smart Driver Training program was presented to all school bus drivers. This program includes instruction on driving strategies and techniques to improve fuel economy and to reduce periods of idling. Our district will be participating in the 2009 provincially sponsored school bus retro fit program to further update the diesel powered buses. (Note: our district participated in the 2006 federally sponsored retro fit program for school buses including diesel oxidation catalyst mufflers and engine crankcase ventilation system upgrades), Bus engine block heaters are controlled by programmable timers that only activate them on school days and for a time period appropriate to the engine and the temperature. Items such as seat upholstery and sealed window panels are re-used from buses that are out of service. For our school buildings, over the years we have been involved in an energy retro fit program like low flow, light sensors, temperature setbacks, water management, lighting, use of low E paint and use of recycled material where possible. Our operations supervisors have kept up to date through Pro D in attending workshops and conferences on related topics and we have made adjustments and changes on a continual basis. Of note is the computer based energy management system (Orca) with our district being one of the first districts on board with the energy management system. We have Co2 sensors in many locations that turn the fresh air flow on/off according to occupancy as well as door sensors (i.e. if gym doors are wide open, A/C will not come on). For ongoing initiatives appliance replacements will be with Energy Star rated appliances. For the past couple of years there has been carpooling between teachers to our rural school locations. Our grounds department supervisors are exploring the use of pesticides and continue to have system discussions.

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

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		part of our budget cycle
Provided driver training to reduce fuel use	in progress	2008 smart Driver Training program presented to all school bus drivers. This program includes instruction on driving strategies and techniques to improve fuel economy and to reduce periods of idling.	part of our professional development program
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	in progress	2008 - thorough maintenance program in place to ensure operational efficiencies for all related equipment.	this is part of our normal and routine maintenance
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	in progress		this is part of our school district and community responsibilities
Encouraged car pooling in fleet vehicles	in progress		

bus retro fit program	will be participating in 2009 provincially sponsored school bus retro fit program to further update the diesel powered buses	participated in 2006 federally sponsored retro fit program for school buses including diesel oxidation catalyst mufflers and engine crankcase ventilation system upgrades
driver training		

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		Smart Driver Training program which includes instruction on driving strategies and techniques to improve fuel economy and to reduce periods of idling. Anti-idling promoted through awareness and signs. Lead-hand meetings.
Supplied power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	in progress		CO2 sensors in many locations that turn the fresh air flow on/off according to occupancy as well as lights in many locations that turn on/off according to occupancy. Energy retro-fit programs
Undertaken Monitor turn-off challenge	in progress		part of employee awareness with promotion at schools of teachers and students.
Replaced # computers with EnergyStar models	in progress		part of our purchasing practices
Asked staff to close blinds daily	in progress		
Used air dry setting on dishwashers	in progress		
Encouraged staff to use stairs	in progress		
Turned off lights in unused rooms	in progress		
Replaced Refrigerators (EnergyStar rated appliance)	in progress		as budgets are approved
Replaced other appliances (with EnergyStar rated appliance)	in progress		as budgets are approved
Installed multi-function devices (and removed stand-alone printers/faxes)		no program at this time - will review in 2009-2010	
Replaced standard bulbs with CFLs	in progress		
Installed motion activated lights	in progress		
Undertaken lighting retrofit	in progress		completed a number of gymnasium lighting upgrades to reduce loads. Replacing (phase 1) ballast to T-8 type. Reducing the lighting in Fulton Secondary for an annual savings. For 2009 - replacing (phase 2) ballasts to T-8 type, this would complete this project.

Implemented server virtualization	in progress		
Utilized desk-top power management settings on computer	in progress		part of employee awareness
Initiated corporate computer shut-down/wake-up for maintenance	in progress		part of employee awareness
Unplugged unused equipment	in progress		part of employee awareness
Applied for LEED existing building rating		no formal program at this time	
Undertaken building energy audit at LOCATION(s)	in progress	Annually completed and reviewed to make adjustments with managing all types of energy	district strategy
Initiated or completed a building energy retrofit	in progress	Completed 2008 during most Heating and Ventilation upgrades	district strategy: For 2009 JW Inglis major HVAC upgrade schedule for 2009. Lighting also addressed during this initiative.
Other:			continued and standard practice

1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Initiated automatic double sided printing			review in 2009-2010
Committed to hold paperless meetings		maintenance safety and staff meetings are digital presentations	under consideration
Developed document library (online and one printed copy) for large documents			maintenance scanning of blueprints and specifications for electronic storage and access.
Re-used non-confidential scrap paper	in progress		reminders to staff
Used laptops/tablets	in progress		salvaging components and re-using an ongoing practice. Using older computers common practice.
Restructured a process to use less paper			initiative to implement electronic faxing through operation in the District. Maintenance Department test bed.
Encouraged re-use of furniture and equipment	in progress		

1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Set a X% Travel reduction goal	in progress		anticipate a direction in 2009-2010 budget
Trained staff in the use of Live Meeting (or other desktop collaborative software)			no formal district plans
Installed Video Conferencing facilities			no formal district plans
Initiated Travel Policy			review existing policy to become carbon friendly
Mandated car pooling to government meetings			no formal plans

1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education			will review in 2009-2010
Provided conservation education			will review in 2009-2010

Held contests to change behaviour/make pledges		will review in 2009-2010
Held contests/support to generate ideas		will review in 2009-2010
Developed Green Teams		will review in 2009-2010
Supported Green Teams (resources)		will review in 2009-2010
Provided green tips		will review in 2009-2010
Supported professional development		will review in 2009-2010
Added green work goal to performance management		will review in 2009-2010

1.6 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	toilets replaced with low flush (either planned or when replacing a breakdown type). Infrared installed for urinals, managed digitally.	district practice
Ran dishwasher only when full	in progress		district practice
Reduced/replaced bottled water with filtered or refrigerated water	in progress		where possible due to local water quality issues
Improved recycling measures	in progress		district practice
Supported composting	in progress		district practice
Used re-usable dishes	in progress		where practical
Purchased green cleaning products	in progress	standard practice ongoing through the Custodial Department	continuing to look for innovations
Used green (low-e paints)	in progress		finding and using water born products in all aspects.
Supported sustainable procurement practices			no formal plans - will review in 2009-2010
Adopted low-carbon contracting practices			no formal plans - will review in 2009-2010