

School District No. 22 (Vernon) - 2009 Carbon Neutral Action Report

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 participating in the 2009 federally sponsored school bus retro fit program to further update the diesel powered buses. (Note: our instruction is based on driving strategies and techniques to improve fuel economy and to reduce periods of idling.) Our district has completed the 2009 federally 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 engine crankcase ventilation system upgrades.) Bus engine block heaters are controlled by programmable timers that only activate timers 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. The School District completed a major electrical retrofit at Fulton Secondary School to reduce energy costs. 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.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

Our district has completed the 2009 federally sponsored school bus retro fit program to further update the diesel powered buses

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. The School District completed a major electrical retrofit at Fulton Secondary School to reduce energy costs. 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.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

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.

School District No. 22 (Vernon) - 2009 Carbon Neutral Action Report

Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)						
Vehicle fuel efficiency						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress		We have completed the provincially sponsored school bus retro fit program to further update the diesel powered buses. Participate in 2006 federally sponsored retrofit program for school buses including diesel oxidation catalyst mufflers and engine crankcase ventilation system upgrades.	we are currently evaluating the last vehicle under this program	2007	2010
Behaviour change program						
Provide fleet driver training to reduce fuel use	Ongoing/In Progress		Smart Driver Training program and strategies 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.	all new drivers will be trained according to smart driver	2005	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress		This is part of our school district and community responsibilities.	will continue to promote anti-idling practices	2007	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Owned buildings						
Establish energy performance baseline for owned buildings	Ongoing/In Progress		Annually completed and reviewed to make adjustments with managing all types of energy. District strategy.	will continue this strategy	2007	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development			No formal program at this time. However new school constructions are designed to this standard.	2010	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress		Completed 2008 during most Heating and Ventilation upgrades. District strategy: JW Inglis major HVAC upgrade completed for 2009. Lighting also addressed during this initiative.	Additional retrofits evaluated, subject to funding	2008	No End Date (Continuous)
Retrofitting owned buildings						
Upgrade lighting systems during retrofits	Complete		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.		2009	2009
IT power management						
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress		Part of employee awareness with promotion at schools of teachers and students.	awareness program will continue	2007	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress		Part of employee awareness, and settings applied to devices where possible	any new copiers or fax machines will have the same settings applied	2008	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress		Part of our purchasing practices.	all new computers will be energy saving models	2006	No End Date (Continuous)

School District No. 22 (Vernon) - 2009 Carbon Neutral Action Report

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Appliances and electronic devices						
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress		Part of our purchasing practices, as budget allows.	All new appliances will be energy saving models	2006	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress		Part of our purchasing practices, as budget allows.	All new appliances will be energy saving models	2006	No End Date (Continuous)
Supplies (Paper)						
Paper Type						
Purchase 100% post-consumer recycled paper	In Development			we are working towards a recycled concept		
Printer/document settings						
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress		staff were encouraged to double side wherever possible	ongoing encouragement	2009	No End Date (Continuous)
Electronic media in place of paper						
Use electronic document library for filing common documents	Ongoing/In Progress		Maintenance scanning of blueprints and specifications for electronic storage and access.	we will continue this practice	1990	No End Date (Continuous)
Behaviour change program						
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		Maintenance safety and staff meetings are digital presentations. Under consideration. Select groups (i.e. maintenance, trustee board meetings) being done	continue to encourage this and expand to other parts of the school district	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress		Reminders to staff.	will continue and expand	2008	No End Date (Continuous)
Other Paper Supplies Actions						
Implementation of electronic faxing to use less paper	Ongoing/In Progress		Initiative to implement electronic faxing through operations in the District.	will continue to expand	2009	No End Date (Continuous)