



March 29, 2010

Carbon Neutral Executive Summary:

SD 42 has continued to work with BC Hydro to reduce energy consumption and carbon emissions. The district has completed an Energy Management Assessment in order to undertake a strategic review of our operations with the purpose of helping us establish a structured energy management program that will deliver sustainable savings into the future. Part of this process has determined the need for an Energy Manager and we had developed a job description to advertise for an individual. This process was put on hold due to the Annual Facilities Grant being cancelled and lack of ability to fund projects in this area. With the AFG being resumed we will be working with Hydro to fill this position. We have completed the first phase of a Geothermal installation at one of our secondary schools in a new addition and plan to expand it to other areas of the school.

We are also in the process of conducting individual energy studies for each of our facilities. This has started with two of our Secondary schools and will progress through the entire district.

Where possible and practical we have worked with BC Hydro on lighting upgrades. We have through our AFG funding undertaken many controls upgrades and this will continue.

We have installed 2 artificial fields at 2 of our secondary schools and are process of installing a third field, eliminating grass cutting and water use.

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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 larger vehicles with smaller models according to fleet "right-sizing" principles	In Development			Review vehicle usage and requirements	2010	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	In Development			Regular maintenace is performed on all vehicles but we we be focusing on fuel efficiency in the future	2010	No End Date (Continuous)
Behaviour change program						
Provide fleet driver training to reduce fuel use	In Development			Set up program	2010	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	In Development			Set up program	2010	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress		review with staff	Formalize policy for SD	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Review with staff (Westcoast Express)	Formalize policy for SD	2009	No End Date (Continuous)
Other Mobile Fuel Combustion Actions						
Convert to Ethanol blended gasoline	Ongoing/In Progress		Plan to convert to Ethanol Blended gasoline	Convert to Ethanol Blended gasoline	2009	No End Date (Continuous)
Convert to Bio Diesel	Ongoing/In Progress		Plan to convert to Bio Diesel	Convert to Bio Diesel	2010	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Planning/management						
Reduce office space (square meters) per employee	Ongoing/In Progress		Disposal of 2 portables	Disposal of 35 portable classrooms	2009	2011
Owned buildings						
Establish energy performance baseline for owned buildings	Ongoing/In Progress		installation of Geothermal system for Garibaldi Secondary in new addition	Expand Geothermo system in rest of the Garibaldi School	2009	2011
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	3	% of owned buildings have undergone energy retrofits since start year indicated	Conducted energy study in 2 of our secondary school and have done a number of lighting retofits and DDC controls upgrades	2008	No End Date (Continuous)
Retrofitting owned buildings						

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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
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	3	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades	Installed Geothermal-Heat pump system at Garibaldi Secondary School on new addition for heating and cooling	Plan to expand this syste to the administration and counselling wing of the school	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	In Development				Plan to upgrade 2 secondary gymnasiums from T12 to T8 fixtures	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	15	% of retrofits (captured above) had control system upgrades or adjustments	Garibaldi Secondary upgraded	Plan to replace Control System at Westview Secondary and other sites	2007	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress			Garibaldi Secondary replaced windows in Gym area and food room.	Plan to replace section of windows at Pitt Meadow Secondary	2009	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	30	% of computers shut down automatically outside of regular business hours	30% of all computers have been done	Continue progam to complete installation on all computers	2009	2011
Implement server virtualization	Complete	100	% of servers have been virtualized since start year indicated	100 % of all computers that can be virtualized have been done		2009	2009
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	IT Department has set up all old and new systems for auto sleep setting and educated users to maintains those settting.		2009	2009
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	100	% of devices have auto-sleep settings applied	IT and Purchasing Departments has set up all old and new systems for auto sleep setting and educated users to maintains those settting.		2009	2009
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	20	% of computers are ENERGY STAR rated	Inprogress as units are replaced	continue program through atrition	2008	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	20	% of fridges are ENERGY STAR rated	replace units as they fail with energy star rated units	replace units as they fail	2008	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			purchasing policy implemented	purchasing policy	2008	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			relamping policy implemented	relamping policy	2007	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	In Development				work with senior team to promote	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development				work with senior team to promote	2010	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Complete			Custodial staff ensure that this is done and remind room users to adhere to this procedure		2008	2009

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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
Provide reminders for turning off lights (e.g., signs, stickers, messages)	In Development				work with senior team to promote	2010	No End Date (Continuous)
Promote hot water conservation	In Development				work with senior team to promote	2010	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Complete	100	% of total paper purchased contains 30% recycled content	Purchasing is responsible to ensure this is done		2008	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	5	% of network printers or photocopiers are set to automatic double-sided	awareness education to staff	promote this policy District wide	2009	No End Date (Continuous)
Electronic media in place of paper							
Use electronic document library for filing common documents	Ongoing/In Progress			Shared files on maintenance server	promote this policy District wide	2008	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			District Website expanded	Continue to post on Website	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete			All staff have been set up with email accounts for receiving pay stubs electronically		2009	2010
Behaviour change program							
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Board of Trustees using this system	promote this policy District wide	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Maintenance and other schools using this system	promote this policy District wide	2008	No End Date (Continuous)
Other Paper Supplies Actions							
Eliminate Paper work request- use Web system for work request	Ongoing/In Progress			Establish more schools on system	Complete and maintain web base work request	2008	No End Date (Continuous)

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Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

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
Business Travel						
Policy and budgeting						
Create a low-carbon travel policy or travel reduction goal	In Development			Refer to Senior team to develop policy	2010	2010
Virtual meeting technology						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	In Development			IT to look at resources required to complete	2010	No End Date (Continuous)
Behaviour change program						
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		Promote the use of web conferencing and tele conferencing	Promote the use of web conferencing and tele conferencing at staff meetings and orientations	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress		Discussions with staff	Review at all staff meeting	2009	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Discussions with staff	Use of Westcoast express for Downtown meeting, review policy with staff	2009	No End Date (Continuous)
Other Sustainability Actions						
Waste reduction/diversion						
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress		All schools are on a paper and cardboard recycling program	Work with senior staff to develop Composting Policy	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Disposal strategy in place	Maintain disposal strategy in place	2008	No End Date (Continuous)
Procurement (non-paper supplies)						
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Complete		All product used in custodial department are Green		2008	No End Date (Continuous)
Building construction, renovation, and leasing						
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress		Recycled windows from school in new construct	Grind waste concrete from school demolition and used in landscaping project	2009	No End Date (Continuous)
Indoor air quality						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		Policy in place and signage in buildings	Continue to expand program	2005	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		Only using latex paint in schools	Look into other products	2006	No End Date (Continuous)