

School District No. 64 (Gulf Islands) - 2009 Carbon Neutral Action Report

Executive Summary

In 2009, School District No. 64 (Gulf Islands) continued to make significant progress towards achieving carbon neutrality with actions ranging from a complete upgrade of the building, electrical and mechanical systems for our middle school facility to working with our students to develop district policy pertaining to energy conservation and environmental sustainability.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

Major initiatives taken in 2009 to reduce Greenhouse Gas Emissions and promote environmental sustainability include the following:

- Building, mechanical, and electrical systems upgrade for the Saltspring Island Middle School.
- Installation of new energy efficient computer labs utilizing Blue Curl technology, which greatly reduces energy consumption and carbon output resulting from computer use.
- Recovery and storage of drainage and irrigation water from the Gulf Islands Secondary School site and re-cycling of the water to irrigate the Saltspring Island Middle School sports field.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

Looking ahead to 2010 and beyond, the district plans to continue to become more energy efficient through the implementation of effective energy reducing measures, to complete district policy on energy conservation and environmental sustainability, and to continue developing and supporting environmental programs for our students and employees.



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"A Community of Learners"

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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 vehicles with more fuel-efficient models	Ongoing/In Progress	30 % of vehicles are fuel- efficient models	Light and heavy duty vehicles evaluated for fuel efficiency.	2010 : Target to replace 1 light duty aging vehicle for fuel efficiency.	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Complete	100 % of vehicles are subject to regular maintenance for fuel efficiency	Ongoing program.	Continuous program.	1995	No End Date (Continuous)
Behaviour change program						
Provide fleet driver training to reduce fuel use	In Development			Smart-Driver training scheduled for 16 bus drivers and 8 maintenance workers.	2010	2011
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress		Training provided to new drivers.	Continuous program for staff members. Continue dialogue with parents through school newsletters regarding "no idling" zones at schools.	2008	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress		Carpooling as an option was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings.	2000	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Alternatives to vehicle travel was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings and in newsletters.	2000	No End Date (Continuous)
Other Mobile Fuel Combustion Actions						
Utilize biodiesel (B-20) for bus fleet	Ongoing/In Progress		Utilizing B-20 bio-diesel.	Change to bio-diesel B-5 anticipated in 2010.	2008	2010
Installed Closed Crankcase Ventilation (CCVs) on bus fleet	Complete		Remainder of buses completed.		2008	2009
Installed Diesel Oxidation Catalysts (DOCs) on bus fleet	Complete		Remainder of buses completed.		2008	2009
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Planning/management						
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress		Data reviewed on an ongoing basis.	Review other available programs.	2000	2012
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development			Review programs in 2010.	2009	2010
Owned buildings						
Establish energy performance baseline for owned buildings	In Development			Review baseline data.	2009	2012
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development			Implement program.	2009	2012
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	10 % of owned buildings have undergone energy retrofits since start year indicated	Energy management system installed in one building.	Energy management system installed in two buildings.	2009	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	Complete	100	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades	Boiler and ventilation upgrades at Saltspring Island Middle School.		2008	2009
Upgrade lighting systems during retrofits	Complete	100	% of retrofits (captured above) had lighting systems upgrades	Lighting upgrade (to T8s) at Saltspring Island Middle School.		2008	2009
Upgrade/adjust control systems during retrofits	Complete	100	% of retrofits (captured above) had control system upgrades or adjustments	DDC control system installed at Saltspring Island Middle School.		2008	2009
Improve building insulation (including windows) during retrofits	Complete	100	% of retrofits (captured above) had insulation improvements	Upgraded attic insulation at Saltspring Island Middle School.		2008	2009
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	50	% of computers shut down automatically outside of regular business hours	Auto shutdown software installed.	Continuous program.	2009	2010
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	Installed in 2009.		2009	2009
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	25	% reduction in printers, copiers, and/or fax machines since start year indicated	Partial replacement completed.	Replace remaining 75%.	2009	2012
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	100	% of devices have auto-sleep settings applied	Settings configured to auto-sleep.		2009	2009
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	75	% of computers are ENERGY STAR rated	25% replacement.	Continued replacement.	2009	2012
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			ENERGY STAR rated appliances purchased.	ENERGY STAR rating required for new purchases.	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			ENERGY STAR rated appliances purchased.	ENERGY STAR rating required for new purchases	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			Incandescent bulbs replaced with more efficient bulbs.	Incandescent bulbs to be replaced with more efficient bulbs.	2008	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Workstations upgraded as part of ongoing maintenance program.	Continuation of on-going maintenance program.	2008	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Distribute Power Smart protocol guide to new staff when hired and to all staff on annual basis.	2008	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)

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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
Encourage use of stairs instead of elevators	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Complete			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Energy conservation measures reviewed at staff meetings.	Ongoing program.	2008	No End Date (Continuous)
Other Stationary Fuel Combustion and Electricity Actions							
IT power management: Installation of new energy efficient computer labs (Blue Curl technology)	Ongoing/In Progress	50	% complete	Five Blue Curl computer labs installed.	Ongoing program.	2009	2012
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			Promote and support use of re-cycled paper through staff awareness.	Ongoing program.	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress			Promote and support use of re-cycled paper through staff awareness.	Ongoing program.	2008	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress			Promote and support use of double-sided printing.	Continuous and ongoing.	2008	No End Date (Continuous)
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development			Planned implementation.	Instruction and deployment.	2009	No End Date (Continuous)
Use electronic document library for filing common documents	In Development			Planned implementation.	Instruction and deployment.	2010	No End Date (Continuous)
Post materials online that were previously printed	Complete			Implementation complete.	Continuous and ongoing with all new materials.	2007	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete			Implementation complete.	Will be continued.	2008	No End Date (Continuous)
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress			Ongoing training.	Instruction and deployment.	2008	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Promote and support paperless meetings and presentations.	Continuous instruction and deployment.	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Promote and support re-use of scrap paper.	Continuous support and deployment.	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						
Virtual meeting technology						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Complete		Elluminate software utilized for web-conferencing.		2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Complete		New staff made aware of web-cameras at regular staff meetings.		2008	No End Date (Continuous)
Behaviour change program						
Train staff in web-conferencing	In Development		Trained staff in use of Elluminate software for web-conferencing.	Ongoing plans for training and researching other methods of web-conferencing.	2008	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress		Carpooling as an option was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings.	2008	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Alternatives to vehicle travel was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings and in newsletters.	2008	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress		Environmental Action Group Encouraging Responsibility (EAGER) at Gulf Islands Secondary School established.	Continuous and ongoing support. Policy development.	2009	No End Date (Continuous)
Other Education, Awareness, and Engagement Actions						
Teacher and district support and resources available for student leadership groups.	Ongoing/In Progress		Promote and support education / leadership regarding sustainability.	Continuous support and resources.	2000	No End Date (Continuous)
District-wide / community retreat on sustainability.	In Development		Planning and development.	Implement.	2010	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		Installed low flow water closets.	Further replacement of old fixtures.	2008	2012
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		Recover irrigation and storm water to re-cycle.	Continuous program.	2008	2009
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		Composting programs active at Gulf Islands Secondary and Mayne Island Schools.	Continuous and ongoing support.	2009	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Ongoing re-cycling program.	Continuous program.	2008	No End Date (Continuous)
Procurement (non-paper supplies)						

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Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Ongoing/In Progress		Policy development to address incorporating minimum recycled content standards for consumable, non-paper supplies.	Complete policy and adhere to the established minimum recycled content standard.	2007	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress		Policy development to address green standards.	Complete policy and adhere to the established standard.	2007	2012
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Complete		Continue awareness campaign of researching new products available.	Ongoing program.	2007	2012
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Complete		Continuous support of use of sustainable and organic food and beverage used in teaching kitchen/cafeteria at Gulf Islands Secondary School.	Continuous and ongoing support of this choice to purchase sustainable and local organic food and beverages.	2007	No End Date (Continuous)
Indoor air quality						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Complete		Promotion to new staff and continuous support and encouragement to be scent-free.	Continuous and ongoing support.	2007	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Complete				2005	No End Date (Continuous)
Commuting to and from home						
Offer staff a compressed work week	Ongoing/In Progress		Approval required on an annual basis.	Ongoing.	2004	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Alternatives to vehicle travel was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings and in newsletters.	2008	No End Date (Continuous)