

School District No. 64 (Gulf Islands)
112 Rainbow Road
Salt Spring Island, B.C.
V8K 2K3

“A Community of Learners”

School District No. 64 (Gulf Islands) - 2011 Carbon Neutral Action Report

Executive Summary

In 2011, School District No. 64 (Gulf Islands) continued to make progress towards its goal of reducing greenhouse gas emissions and attaining carbon neutrality through a variety of actions ranging from mechanical and electrical building system upgrades to providing educational programs for our students on energy conservation and environmental sustainability.

2011 Greenhouse Gas Emissions

For 2011, the district had total Greenhouse Gas (GHG) emissions of 508 tonnes CO₂e. It was estimated that stationary fugitive emissions from cooling do not comprise more than 0.01% of School District No. 64 (Gulf Islands) total emissions and an ongoing effort to collect or estimate emissions from this source would be disproportionately onerous. For this reason, emissions from this source have been deemed out-of-scope and have not been included in School District No. 64 (Gulf Islands) total greenhouse gas emissions profile.

Offsets Applied to Become Carbon Neutral in 2011

For our district, total offsets purchased for 369 tonnes CO₂e at a cost of \$9,225.00 have been applied to become carbon neutral for 2011. As required by section 5 of the Carbon Neutral Government Regulation, 139 tonnes CO₂e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions profile in 2011. However, they were not offset as they are out-of-scope under section 4(2)(c) of the Carbon Neutral Government Regulation.

Changes to Greenhouse Gas Emissions and Offsets Reporting from Previous Years

Following the public release of School District No. 64 (Gulf Islands) 2010 Carbon Neutral Action Report, it was determined that the total emissions for the 2010 calendar year were under reported by 105 tonnes CO₂e. The surplus of offsets purchased in 2010 has been applied against our 2011 emissions.

Actions Taken to Reduce Greenhouse Gas Emissions in 2011

Major initiatives taken in 2011 to reduce Greenhouse Gas emissions and promote environmental sustainability include the following:

- Lighting system upgrades for Gulf Islands Secondary School and for Plant Services.
- Control system upgrade for the building ventilation system for Salt Spring Elementary School.
- Continued support and development of educational programs and courses on energy conservation and environmental sustainability through our Saturna Ecological Education Centre (SEEC) and through our Middle Years Shared Ecological Education Centre (MYSEEC).

Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

Looking ahead to 2012 and beyond, the district will continue to focus on the retrofit of building mechanical systems for a number of our school buildings, completion of our Board policy on environmental sustainability, and continued support of environmental programming for our students and staff.

Signed:



Secretary Treasurer
School District No. 64 (Gulf Islands)

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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 <i>Greenhouse Gas Reduction Targets Act</i> .							
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	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	40	% of vehicles are fuel- efficient models	Replaced one (1) aging van and one (1) aging mini-bus.	2012: Target to replace 1 light duty aging vehicle for fuel efficiency.	2008	No End Date (Continuous)
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Regular maintenance program.	Continuous program.	1995	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	100	% of current drivers are trained	Smart driver training reviewed in 2011.	Continuous program.	2010	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	100		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)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Enroll in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			BC Hydro data reviewed on an ongoing basis.	Review baseline data.	2000	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development				Review programs in 2012.	2009	2012
Owned buildings							
Establish energy performance baseline for owned buildings	Ongoing/In Progress			BC Hydro data reviewed on an ongoing basis.	Review baseline data.	2000	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress			Recovery and recycle program deployed through refrigerant contractor.	Continuous program.	2009	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress			Remaining buildings reviewed for potential energy conservation projects.	Develop applications for capital funding for mechanical, electrical and control retrofits - 2012/2013.	2009	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	In Development				Planning HVAC upgrade for Gulf Islands Secondary School in 2013.	2010	2013
Upgrade lighting systems during retrofits	In Development				Planning lighting upgrade for Gulf Islands Secondary School in 2012.	2010	2013
Upgrade/adjust control systems during retrofits	In Development				Planning control system upgrades for Gulf Islands Secondary School, Fernwood Elementary School, Mayne Island School and Galiano Community School in 2012/2013.	2010	2013
Improve building insulation (including windows) during retrofits	In Development				Planning window upgrade projects for Saltspring Island Middle School, Mayne Island School, Galiano Community School and Fernwood Elementary School in 2012/2013.	2010	2014
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	80	% of computers shut down automatically outside of regular business hours	Auto shutdown software installed.	Continuous program.	2009	2012

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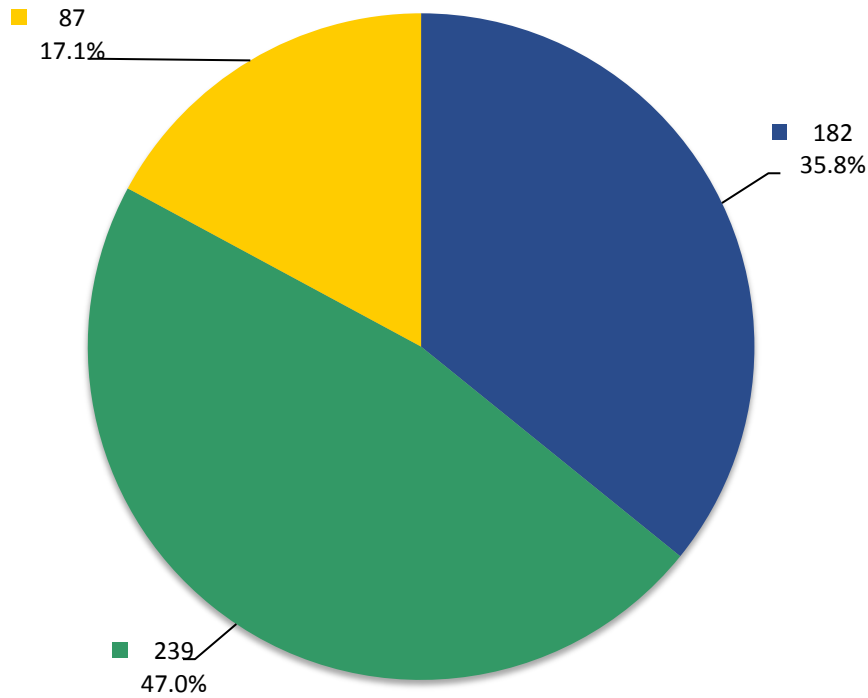
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	80	% reduction in printers, copiers, and/or fax machines since start year indicated	Continued replacement of stand-alone devices.	Replace remaining 20%.	2009	2012
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	85	% of computers are ENERGY STAR rated	Continued replacement of old units.	Continue replacement.	2009	2012
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Workstation upgraded as part of ongoing maintenance program.	Continuation of ongoing 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. IT technicians reviewed power shutdown protocol with all computer lab classes (teachers and students).	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)
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)	Ongoing/In Progress			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, Electricity, and Fugitive Emissions Actions							
IT power management: installation of new energy efficient computer labs (Blue Curl technology).	Ongoing/In Progress	90	90% of district computer labs converted to Blue Curl technology.	One Blue Curl computer lab installed.	Two future labs to be converted to Blue Curl technology in 2012.	2009	2013
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			Promote and support use of recycled 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 recycled 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	80	% of network printers or photocopiers are set to automatic double-sided	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)
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)

School District No. 64 (Gulf Islands) - 2011 Carbon Neutral Action Report
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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel						
Behaviour change program						
Train staff in web-conferencing	Ongoing/In Progress		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) continued participating with the Board in developing Board policy on Environmental Sustainability.	Continued work on policy development.	2008	2012
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 and urinal flush control units at Fulford Community Elementary School.	Further replacement of old fixtures.	2008	
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		Ongoing programs at Gulf Islands Secondary School and Galiano Community School.	Continuous and ongoing support.	2009	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Ongoing recycling program.	Continuous program.	2008	No End Date (Continuous)
Procurement (non-paper supplies)						
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	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Initiated movement towards use of advanced "bio" products.	Ongoing program.	2007	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		Policy development to address reuse of materials.	Complete policy.	2009	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 motor vehicle travel was promoted and encouraged.	Continuous program of promotion/encouragement at staff meetings and in newsletters.	2008	No End Date (Continuous)

**School District 64 - Gulf Islands
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 507

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 12:27 PM)

Total offsets required: **369**. Total offset investment: **\$9,225**. Emissions which do not require offsets: **139** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.