



2011 Carbon Neutral Action Report

Executive Summary:

School District No. 85 (Vancouver Island North) is continuing with its commitment to educate students and staff alike in the reduction of energy consumption. Our exploration of means to reduce the energy usage in all of our buildings is an ongoing process and we carefully examine all possible avenues to provide a more cost effective reduction plan that provides a cleaner teaching and living atmosphere for the residents of Northern Vancouver Island.

Our Leadership:

The Board expects students and staff to recycle and reduce energy consumption at all schools.

Our Energy Consumption Reduction:

In 2011 one elementary school heating system was renovated and heat pumps were installed to lower the amount of electricity used. A second elementary school received renovations for seismic purposes and, as part of the work, more energy efficient roofing and walls were installed. Changes in the student demography in School District No. 85 have resulted in the consolidation of two Port Hardy elementary schools into one school. A similar consolidation has occurred in the Port McNeill area. School District No. 85 continues to track and document the usage of maintenance and transportation vehicles' gas and diesel consumption with most of our vehicles now using Bio-diesel. One older vehicle was replaced with a newer model that uses less gasoline, and we will continue to upgrade and replace vehicles as needed. We continue to work with B.C. Hydro and are recognized as one of their energy partners obtaining eleven credits within their program this year. At various times throughout the year we have been able to reduce the energy use in some of our schools below the baseline amount established by BC Hydro.

Offsets Applied to Become Carbon Neutral in 2011

Recently School District No. 85 paid \$20,219.52 to the Pacific Carbon Trust to purchase 722.81 tonnes therefore making our district carbon neutral for 2011.

As required by section 5 of the Carbon Neutral Government Regulation, 70,650.04 litres (170.60 tonnes) of CO₂ emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions profile in 2010. However, they were not offset as they are out-of-scope under section 4 (2) of the Carbon Neutral Government Regulation.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emission in 2011

One school received an HVAC upgrade. The new system is more energy-efficient than the previous system. Our district-wide computerized heating regulation system was also updated this year. This system controls the scheduled heating times and other settings for the various heating systems throughout the school district. The system is programmed to automatically reduce building temperatures during periods when the premises are vacant and also to restore building temperatures by the time the premises are in use. This upgraded system has resulted in significantly lower energy consumption.

Plans to Continue Reducing Greenhouse Gas Emissions 2012– 2013

School District No. 85 continues to focus on becoming carbon neutral. We have requested an energy audit of all of our buildings by BC Hydro in the expectation that with outside expertise we can continue to reduce our energy consumption. A review of some of the buildings has revealed that replacing the single pane windows with more energy-efficient glass would result in energy savings. As capital funding permits, we will pursue this area of energy conservation during the next few years. We intend to continue reducing, re-using and recycling and seek to be environmentally friendly by adopting an improved energy awareness program across the district.



John Martin
Secretary - Treasurer

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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 12/31/11)	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 larger vehicles with smaller models according to fleet "right-sizing" principles	In Development				to replace vehicles as required	2008	No End Date (Continuous)
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress			scheduled regular service of all vehicles	to continue with scheduled regular servicing of vehicles	2008	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Completed in 2011			workshop held in August to remind drivers of safe driving practices		2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development	50	% of buildings have a real time metering system installed		to upgrade heating systems if funding becomes available	2008	No End Date (Continuous)
Owned buildings							
Establish energy performance baseline for owned buildings	In Development	90	% of owned buildings have an established energy performance baseline		B.C. Hydro is setting baselines	2008	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	In Development	50	% of owned buildings have undergone energy retrofits since start year indicated		to upgrade remaining systems if funding becomes available	2008	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Completed in 2011			one elementary school was retrofitted and heating system was upgraded		2008	2011
Upgrade/adjust control systems during retrofits	Completed in 2011			one elementary school control system was upgraded		2008	2011
IT power management							
Implement server virtualization	Completed in 2011	44	% of servers have been virtualized since start year indicated	a third virtual server was set up with 4 virtual machines		2010	2011
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress			replaced some computers with newer models	to continue to replace computers as needed	2008	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			employees are encouraged to use recycled paper products	to continue to encourage employees to purchase and use recycled products	2008	No End Date (Continuous)

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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
Purchase 40% post-consumer recycled paper	Ongoing/In Progress		employees are encouraged to use recycled paper products	to continue to encourage employees to purchase and use recycled products	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress		employees are encouraged to use recycled paper products	to continue to encourage employees to purchase and use recycled products	2008	No End Date (Continuous)
Electronic media in place of paper						
Use electronic document library for filing common documents	In Development			policy manuals, etc. are being kept on line	2008	No End Date (Continuous)
Post materials online that were previously printed	In Development			policy manuals, etc. are being kept on line	2008	No End Date (Continuous)

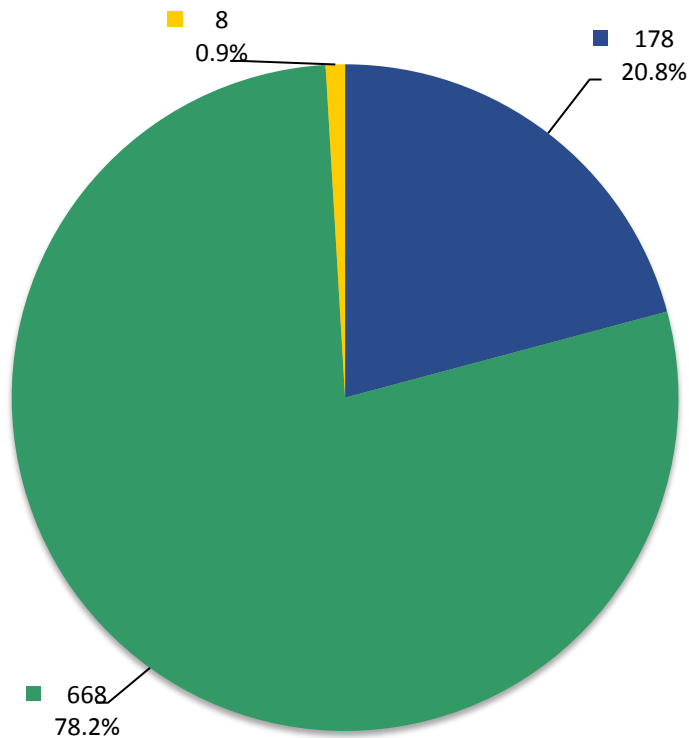
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Actions to Reduce Provincial Emissions and Improve Sustainability

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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	In Development			to install water efficient urinals and toilets when required	2008	No End Date (Continuous)

School District 85 - Vancouver Island North Greenhouse Gas Emissions by Source for the 2011 Calendar Year (tCO₂e*)



Total Emissions: 854

- 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 12:43 PM)

Total offsets required: **723**. Total offset investment: **\$18,075**. Emissions which do not require offsets: **132** **

*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.