



**School District No.84 (Vancouver Island West)**

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**2011 Carbon Neutral Action Report**

**Executive Summary**

School District No. 84 (Vancouver Island West) has been contributing to carbon neutrality through equipment replacement and upgrades, building renovation and upgrades, and working with employees and students to reduce energy consumption. The key initiative in 2011 has been the approval from the Ministry of Education to replacing an aging school in Zeballos. The completion of this school replacement is planned for September 2013. Other initiatives included the installation of a document management system for storing documents in an electronic format, and replacement of three vehicles with newer energy efficient vehicles.

School District No.84 (Vancouver Island West) is educating employees and students to recognize opportunities to contribute to environmental sustainability. By modeling energy conservation and introducing environmental awareness programs in all workplaces, we hope to enable staff and students alike to feel empowered that they can personally make a difference for our shared environment. Unfortunately from September to December 2011, due to teachers strike actions, the school district made minimal progress with education of its employees with energy conservation.

**2011 Greenhouse Gas Emissions**

• Mobile Fuel Combustion (Fleet and other mobile equipment) =	57.00 tonnes CO2e
• Stationary Fuel Combustion and Electricity (Building) =	188.00 tonnes CO2e
• Supplies (Paper) =	1.00 tonnes CO2e
• Fugitive Emissions =	0.00 tonnes CO2e
<u>Total 2011 Greenhouse Gas Emission</u>	<u>246.00 tonnes CO2e</u>

It was estimated that stationary fugitive emissions from cooling do not comprise more than 0.01% of School District 84's 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 84's total greenhouse gas emissions profile.

**Offset Applied to Become Carbon Neutral in 2011**

• Total 2011 Greenhouse Gas Emissions =	246.00 tonnes CO2e
• Emission Which Do Not Require Offsets =	<26.00> tonnes CO2e
<u>Total Offset Purchased (refer to appendix A)</u>	<u>220.00 tonnes CO2e</u>
• Adjustment to Offset purchased in 2010 =	<7.00> tonnes CO2e
<u>Total Offset Investment (before taxes)</u>	<u>\$5,325.00 cdn</u>

As required by section 5 of the Carbon Neutral Government Regulation, 26.0 tonnes CO<sub>2</sub>e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions profile 2011. However, they were not offset as they are out-of-scope under section 4 (2)(c) of the Carbon Neutral Government Regulation.

An adjustment in 2011 for <7.00> tonnes CO<sub>2</sub>e was made for 2010 Carbon Offset purchases. The revised 2010 Carbon Offset emission was 180 tonnes CO<sub>2</sub>e, where the initial amount reported for 2010 was 187 tonnes CO<sub>2</sub>e. This adjustment was due mainly to the initial total were based on estimates.

#### **Action Taken to Reduce Greenhouse Gas Emission Activities in 2011**

- Continue upgrade of fleet with more energy efficient and rights size vehicles .
- Continue replacement of computers and peripherals with energy star units.
- Continue to increase the percentage of 30% and 100% recycled content paper purchased.
- Continue lighting and insulation upgraded in schools.
- Completed posting of anti-idling signage in the district.
- Completed installation of document management system.
- Completed implementation for scanning of accounts payable invoices, and board minutes.
- Completed installation of video conferencing equipments.

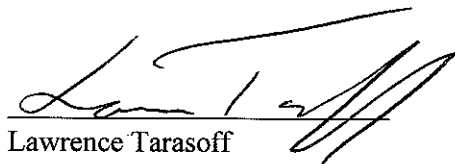
#### **Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014**

- Continue to look for opportunities to reduce the number of stand alone printers, copiers fax machines as well as non Energy Star fridges.
- Complete post lights out reminders in remaining schools.
- Increase the percentage of 30% and 100% recycled content paper purchased.
- Continue to explore opportunities to right-size district vehicles as they are replaced.
- Complete replacement of new school in Zeballos by September 2013.
- Expand use of document management system for retaining payroll, and HR records.



Carol Donaldson  
Chairperson

MAY 7/2012



Lawrence Tarasoff  
Superintendent/Secretary Treasurer

MAY 7/2012

# School District 84 Vancouver Island West - 2011 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 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>							
<b>Vehicle fuel efficiency</b>							
Replace vehicles with more fuel-efficient models	Ongoing/In Progress			Although no fuel efficient vehicles were purchased in 2010, all vehicle purchases include fuel efficiency as a part of the selection criteria.	Continue to consider fuel efficiency when purchasing replacement vehicles. On going, the district has a replacement plan to replace all vehicles on a 7 - 10 year life cycle.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	60	% of vehicles down-sized since start year indicated	Replaced three V8 engine truck with a V6 engine truck. Also review the use of the vehicle, will it be used on paved and gravel roads, or paved roads only.	Continue to consider right-sizing when purchasing replacement vehicles	2010	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	All vehicles were subject to regular maintenance for fuel efficiency	Ongoing and continuing practice	2008	No End Date (Continuous)
<b>Behaviour change program</b>							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	100	% of current drivers are trained	Continue to provide new bus driving employees with appropriate training and orientations.	Ongoing and continuing practice.	Started before 1995	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		Follow with provincial guidelines. Installed anti idling signage at all schools	Ongoing and continuing practice, and reminder to employees	2010	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	100		Encourage car pooling to out of town meetings as much as possible.	Ongoing and continuing practice.	2008	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>							
<b>Planning/management</b>							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress	100		Completed setup of Ministry SMARTTool Carbon data gathering tool, and have completed entry of CO2e for 2010 and 2009	Continual use of SMARTTools to gather CO2e data	2009	No End Date (Continuous)
Reduce office space (square meters) per employee	Ongoing/In Progress			Continued review best utilization of building space	To continually review best utilization of building space	2008	No End Date (Continuous)
<b>Owned buildings</b>							
Establish energy performance baseline for owned buildings	Ongoing/In Progress	100	% of owned buildings have an established energy performance baseline	Completed setup of Ministry SMARTTool Carbon data gathering tool, and have completed entry of CO2e for 2010 and 2009	Continual use of SMARTTools to gather CO2e data	2009	No End Date (Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	In Development			Have incorporated into new school being built in Zeballos	To complete construction of new school in Zeballos by Sept 2013. Will incorporate into any new building constructions.	2011	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development			Have incorporated into new school being built in Zeballos	To complete construction of new school in Zeballos by Sept 2013. Will incorporate into any new building constructions.	2011	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development			Have incorporated into new school being built in Zeballos	To complete construction of new school in Zeballos by Sept 2013. Will incorporate into any new building constructions.	2011	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	50	% of owned buildings have undergone energy retrofits since start year indicated	Continue with lighting and insulation was upgraded in for all building	Continue energy retrofits as buildings are upgraded	2007	No End Date (Continuous)
<b>Retrofitting owned buildings</b>							
Upgrade lighting systems during retrofits	Ongoing/In Progress			One building had a lighting upgrade	Continue lighting retrofits as buildings are upgraded	2002	No End Date (Continuous)
<b>IT power management</b>							
Install power management software which shuts down computers outside of regular business hours	In Development			Review existing practices	Will determine what available technological options are available. To be completed in this time frame	2011	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	100	% of computers have auto-sleep settings applied	Continue to setup new computers and monitors with auto sleep	Continue and ongoing	2008	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	75	% reduction in printers, copiers, and/or fax machines since start year indicated	No machines reduced this year	Continue to reduce as able	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
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	100	% of devices have auto-sleep settings applied	Continue to setup new printers, copies, multi-functional copiers with auto sleep	Continue and ongoing	2008	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	100	% of computers are ENERGY STAR rated	All computers are Energy Star. In 2010, school district moved towards a thin client technology to save on energy. This plan was scaled back in 2011 as the efficiency lost to users completing task was not viable.	Continue and ongoing	2008	No End Date (Continuous)
<b>Appliances and electronic devices</b>							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	75	% of fridges are ENERGY STAR rated	One refrigerator was replaced in 2011	Continue to replace with Energy Star models	2008	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	In Development				Review other appliances replacement, and proceeds as budget allows	2012	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	In Development				Review replacement of desk lamps with either CFL or LED lamps. Determine which type is best for workers in lighting environment.	2012	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	In Development	0	% of current staff have completed a workstation tune-up		Investigate workstation tune-ups	2011	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	In Development				Will implement "Green Behavioral" changes	2012	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				Will investigate the reducing after hours occupancy of schools by employees. Will investigate the viability of "Team Custodial" cleaning.	2012	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	60	% of schools with stickers in place	Stickers placed in two schools	Continue sticker placement	2006	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	50	% of total paper purchased contains 30% recycled content	Increased percentage of 30% recycled content paper purchased	Continue to increase percentage purchased as price warrants	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	10	% of total paper purchased contains 100% recycled content	Increased percentage of 100% recycled content paper purchased	Continue to increase percentage purchased as price warrants	2009	No End Date (Continuous)
<b>Electronic media in place of paper</b>							
Use electronic document library for filing common documents	Ongoing/In Progress			Have completed installation and setup of Laserfiche document management system. Have started to scan all Accts Payable invoice, this will reduce storage space for retaining prior years invoices, and multiple copies of invoices. Completed scanning of Board Meeting Minutes	To continue scanning of Accts Payable invoices and Board Meeting minutes. Begin scanning of Payroll, Human Resource, and student records documents.	2011	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Continue with posting of organization annual reports, and financial documents on district website	Continue and ongoing	2010	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development				Review viability	2012	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Have installed hardware for electronic video conferencing.	Need to test and train.	2011	No End Date (Continuous)
<b>Other Paper Supplies Actions</b>							
Integration of Document Management system with Financial System	Ongoing/In Progress			Have completed integration of Accounts Payable invoices scanned in Laserfiche with Financial System. This will make information more readily available for users, and will eliminate the need for schools and the Board Office to having duplicate copies of invoices, a and will reduce storage space.	Will investigate the integration of Payroll and Human Resources documents stored in Laserfiche with the Payroll and HR system.	2012	No End Date (Continuous)
Electronic routing approval of Accounts Payable invoices	In Development				Will implement electronic routing and approval of Accounts Payable invoices.	2012	No End Date (Continuous)
Switch to electronic fund transfer (EFT) of Accts Payable payments to vendors and electronic payment notification system in place of paper cheques and stubs	Ongoing/In Progress			Have moved all employee to EFT for Accts Payable payments. Have begun switching external vendors to EFT for Accts Payable payments.	Move towards setting up all external vendors with EFT of Accts Payables payments	2008	No End Date (Continuous)

## School District 84 Vancouver Island West - 2011 Carbon Neutral Action Report

### Actions to Reduce Provincial Emissions and Improve Sustainability

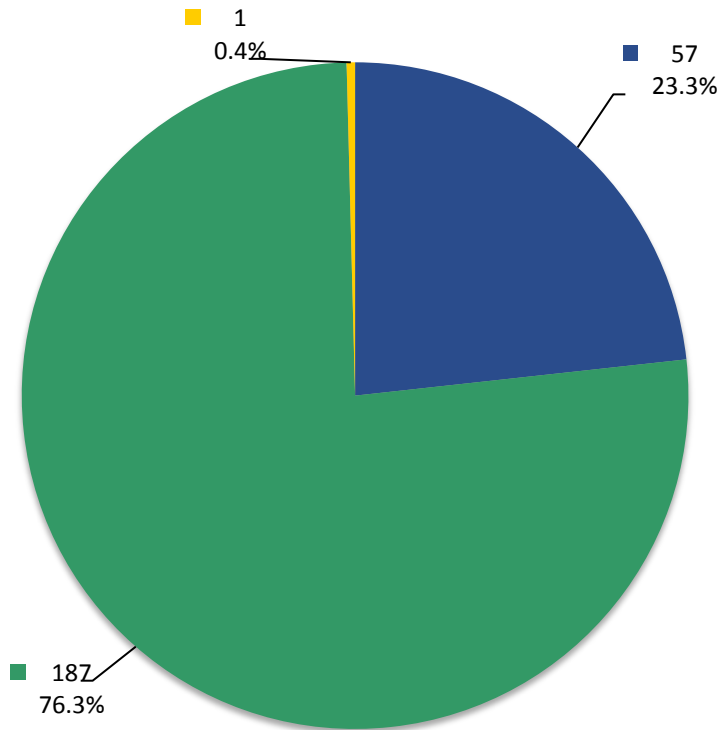
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to 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
<b>Business Travel</b>						
<b>Virtual meeting technology</b>						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	100 % of computers have web-conferencing software installed	All computers can run web conferencing software.	Continue and encourage web conference whenever feasible	2010	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	20 % of staff have access to a desktop web-camera	Have started purchasing web cameras for some computers	Continue to purchase web-cameras for computers	2011	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	100 % of meeting rooms have access to video-conferencing equipment	Have installed video conferencing hardware at all schools and board office.	Need to test and train staff	2011	No End Date (Continuous)
<b>Behaviour change program</b>						
Train staff in web-conferencing	Ongoing/In Progress	50 % of staff are trained web-conferencing	Continue with training of staff with web conference and use where feasible	Continue and ongoing	2010	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	In Development	0 % of staff are trained in video-conferencing or have access to technical support		Need to test and train staff	2012	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		Encourage employees to continue and expand with virtual conference	Continue and ongoing	2010	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress		Encourage employees to car pool to out of town meeting when feasible.	Continue and ongoing	2008	No End Date (Continuous)
<b>Other Business Travel Actions</b>						
Encourage students with virtual attendance for educational programs.	In Development			Continue with review of providing educational programs to students.	2012	No End Date (Continuous)
Utilize Document Management System	In Development			Utilize Document Management System to allow individuals to view documents remotely rather than having to drive to a location to view these documents in person. Perhaps expanding to external auditors so they can perform audit remotely and not have auditors travel to the school district.	2012	No End Date (Continuous)
Utilize Work Flow system	In Development			Utilize Work Flow System to allow individuals to electronically route documents instead of driving and delivering documents in person. Also to reduce the need to deliver mobile documents to various locations.	2012	No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>						
<b>Team-building</b>						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress		Due to teachers strike in the later half of 2011, participation in extra curricular activities has been curtailed.	Continue and ongoing	2011	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		Due to teachers strike in the later half of 2011, participation in extra curricular activities has been curtailed	Continue and ongoing	2011	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development			Need to review and investigate feasibility	2012	No End Date (Continuous)
<b>Staff awareness/education</b>						
Provide education to staff about the science of climate change	Ongoing/In Progress		Due to teachers strike in the later half of 2011, participation in extra curricular activities has been curtailed.	Continue and ongoing	2011	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Due to teachers strike in the later half of 2011, participation in extra curricular activities has been curtailed.	Continue and ongoing	2011	No End Date (Continuous)
<b>Other Sustainability Actions</b>						
<b>Other Sustainability Actions</b>						

School District 84 Vancouver Island West - 2011 Carbon Neutral Action Report

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 Background Information	In Development			<p>School District 84 is large geographically, but in terms of enrollment is among the smallest school districts in British Columbia. It is located on the northwest side of Vancouver Island. We educate about 440 pupils in five schools, of which two schools are located in the Gold River. One school is located in Tahsis which is only by assessible air or via a logging road by vehicle 1.5 hours from Gold River. Another school is located in Zeballos which is accessible via air, or 1 hour by water taxi via Tahsis, or 3.0 hours on logging roads from Gold River. Another school is located in Kyuquot which is accessible via air 1.5 hours or via road and ferry in 6.0 hours.</p> <p>*note* there are challenges in the School District 84 with the attempt to implementing new environmental enhancements.</p> <p>The first; there is a lack of skilled individuals to install and maintain new environmental equipment (e.g. solar panel, hybrid vehicles...), the closet community which may have these skilled individual is in Campbell River which is a 1 hour vehicle drive from Gold River.</p> <p>Two; In the community of Kyuquot there is no natural gas line servicing the community.</p>	Information only	2009	No End Date (Continuous)

**School District 84 - Vancouver Island West  
Greenhouse Gas Emissions by Source  
for the 2011 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 245**

- 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 12:42 PM)**

Total offsets required: **220**. Total offset investment: **\$5,500**. Emissions which do not require offsets: **26** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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.