

**Carbon Neutral Action Report
School District No. 85 (Vancouver Island North)**

Executive Summary

School District No. 85 (Vancouver Island North) will consider carbon neutrality issues in all facets of its operations. The Board intends to invest in equipment and lighting retrofits and is seeking a commitment from employees and other building occupants to reduce energy consumption. The Superintendent is spearheading an effort to incorporate Environmental Education and Sustainability Initiatives in all schools. Using Annual Facility Grants, the Board will undertake upgrades to lighting, mechanical and control systems. This will improve comfort to building occupants and allow the district to operate its buildings economically and in a more environmentally sustainable way.

In 2008 - 2009, the district has undertaken some steps towards a more sustainable approach, in the areas of student transportation, supplies consumption and staff travel. A number of low cost measures have been implemented such as turning off equipment when not in use, optimizing equipment performance through preventive maintenance and refined scheduling. Schools will integrate more environmental awareness into student activities. Recycling, composting and waste reduction programs continue to expand in the schools with increased student and teacher participation. We are re-using furniture and equipment whenever practical and many of our sites are re-using non-confidential scrap paper to minimize waste. We've continued with our vehicle preventive maintenance and anti-idling programs as well as encouraged employees to carpool whenever practical.

Some of the higher cost measures include replacement of older fleet vehicles with more efficient vehicles and we continue to use sustainable products for cleaning and building maintenance.

Objectives

School District No. 85 (Vancouver Island North) will take a leadership role and demonstrate the measures that can be taken to reduce greenhouse gas (GHG) emissions in the school community. We see this as a responsibility and opportunity to engage our students, employees and partners in the District's mandate to reduce GHG emissions.

Opportunities for our students, employees, partners and the community to see the impact of changes in behaviour by focusing on this public priority will have a positive impact on our learning and working environments and community. Our employees and students will be encouraged to take examples of their accomplishments home and into the community.

The measures we take will allow our organization to become more fiscally responsible by reducing waste through energy conservation. Other benefits will include a healthier community as we move towards more active modes of transportation resulting in cleaner air in our community. Sustainability will allow us to balance social, economic and environmental issues for future generations within the District and local communities. A key objective is to increase environmental awareness of staff and students.

Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008

Overview

Our primary focus during this period has been in the categories of stationary fuel combustion/electricity, mobile fuel combustion, sustainability actions and supplies.

In the stationary fuel combustion/electricity category we've implemented primarily low cost actions where we have been able to reduce energy consumption by utilizing software and existing features on equipment to reduce energy consumption. We worked with the BC Hydro Power Smart program to encourage staff to lower thermostats and turn off lights in unoccupied rooms. Nearly all of our schools now have remote-access HVAC/Lighting control systems to help us reduce power consumption. All new equipment purchased must be energy star rated. We are completing lighting changes as existing lamps are replaced.

In the mobile fuel category, the district piloted the anti-idling program and this will be continued. The district has a vehicle preventive maintenance program as well as encouraged trades staff to carpool whenever practical. We have also replaced several buses and fleet vehicles with improved efficiencies over the replaced vehicles.

In the sustainable actions category we've continued to encourage the 3 R's: Reduce, Recycle and Reuse. We are reducing water consumption in schools by using timers on irrigation and urinals; we are changing faucets to low-flow and we are now using green cleaning and paint products.

In the supplies category we are re-using furniture equipment when ever practical and many of our sites are re-using non-confidential scrap paper to minimize waste. Two schools and two continuing education centres with very low enrolments closed in June 2008, leading to reduced GHG emissions. The recent implementation of environmental education initiatives will support the effort to reduce GHG emissions. Students and staff will also become more knowledgeable about sustainability issues.

1.1 Mobile Fuel Combustion

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Avoid higher fuel consumption costs needed to operate older buses and fleet vehicles.	Capital Plan includes replacement of school buses. Annual Budget includes provision for replacement of older fleet vehicles (maintenance trucks etc).
Provided driver training to reduce fuel use	In Progress	Reduction in bussing fuel costs and measurable using historical fuel consumption data comparisons.	Transportation supervisors have been trained to provide driver training to SD employees.
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress	Improved vehicle performance and efficiency and able to avoid higher fuel consumption costs.	Ongoing part of our preventative vehicle maintenance program. Bus drivers check tire pressure as part of pre-trip inspections.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	Complete	Reduced fleet fuel costs and measurable using historical fuel consumption data comparisons.	Training to staff, signage, stickers, programs promoting anti-idling behaviour.
Encouraged car pooling in fleet vehicles	In Progress	Reduced fleet fuel costs and measurable using historical fuel consumption data comparisons.	Supervisors are encouraging car pooling when practical.
Encouraged use of public transit/active transportation	In Progress	Reduced fleet fuel costs and measurable using historical fuel consumption data comparisons.	Supervisors are encouraging use of public transportation when practical. Bus service started on the North Island in 2008.

Established travel reduction goals	In Progress	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	As a district with widely dispersed schools, it is anticipated that an initial 10% reduction in travel is achievable.
Adopted a travel policy	In Progress	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles. Reduction in other travel related costs.	The existing policy will be amended to encourage reduction in GHG emissions and travel avoidance initiatives.

1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # computers with EnergyStar models	In Progress	More EnergyStar rated computers in service resulting in reduced electrical consumption	Program to replace all old computers with newer EnergyStar rated computers.
Asked staff to close blinds daily	In Progress	Improved comfort and less comfort related complaints.	Staff are encouraged to close blinds to reduce solar heat gain or heat loss seasonally.
Used air dry setting on dishwashers	In Progress	Reduced energy consumption.	Staff are encouraged to use air dry setting on dishwashers.
Turned off lights in unused rooms	Complete	Monitor energy consumption history and trends indicated reduction in overall energy consumption.	Continuing to maintain occupancy sensors in schools and we encourage occupants and custodians to turn out lights to conserve energy.
Replaced Refrigerators (EnergyStar rated appliance)	In Progress	Reduced energy consumption.	Older refrigerators are being replaced with EnergyStar rated appliances.
Replaced other appliances (with EnergyStar rated appliance)	In Progress	Reduced energy consumption.	Older appliances are being replaced with EnergyStar rated appliances.
Installed multi-function devices (and removed stand-alone printers/faxes)	Complete	Reduced energy consumption.	All photocopiers were replaced with newer models, most with printer and fax capability.
Replaced standard bulbs with CFLs	Complete	Reduced energy consumption and measurable by comparing historical consumption data.	Standard bulbs replaced with CFLs
Installed motion activated lights	In Progress	Reduced energy consumption.	Several classrooms have been retrofitted with motion detecting lights.
Undertaken lighting retrofit	In Progress	Reduced energy consumption.	When they burn out, older lamps are replaced with newer, energy efficient lamps. Some schools are complete.
Utilized desk-top power management settings on computer	Complete	Reduced energy consumption.	Computer labs have automatic timed shut down and office PCs have auto sleep mode enabled.
Initiated corporate computer shut-down/wake-up for maintenance	Complete	Reduced energy consumption.	Software acquired through a BC Hydro rebate program to centrally power-down all computer labs.
Unplugged unused equipment	Complete	Reduced energy consumption.	Staff are encouraged to close blinds to unplug any unused equipment.
Undertaken building energy audit at LOCATION(s)	Complete	Information required to develop a business case and apply for product incentive funding.	Lighting audits completed in all larger buildings.

1.3 Supplies			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	In Progress	Reduced paper consumption and landfill waste.	All future orders for letterhead and photocopy paper will comply with this standard.
Initiated automatic double sided printing	In Progress	Reduced paper consumption, paper costs, and landfill waste. More wear and tear on copier equipment associated with two sided printing.	Staff members are encouraged to print and photocopy in duplex mode.
Changed document template margins	In Progress	Reduced paper consumption and landfill waste.	Staff members are encouraged to change fonts and margins in templates to reduce paper consumption.
Committed to hold paperless meetings	In Progress	Reduced paper consumption and landfill waste.	We are planning to having agendas and supporting documents for Board meetings on laptops.
Developed document library (online and one printed copy) for large documents	Complete	Reduced paper consumption and landfill waste.	All key internal documents are available on-line. Sets of external documents are scanned and shared by email.
Used collaborative software to edit on-line	Complete	Reduced paper consumption and landfill waste.	Staff can collaborate on-line using various types of software.
Re-used non-confidential scrap paper	In Progress	Reduced paper consumption and landfill waste.	Some sites have taken this initiative on to minimize paper waste.
Used laptops/tablets	Complete	Reduced paper consumption and landfill waste.	Staff members use laptops to perform their duties. Students have access to class sets of laptops.
Restructured a process to use less paper	Complete	Reduced paper consumption and landfill waste.	Extensive use of email and electronic document storage.
Chose "Green" items from Distribution Centre	In Progress	Reduced negative impacts on the environment and human health.	All custodial supplies must be "green".
Encouraged re-use of furniture and equipment	In Progress	Reduced furniture equipment costs and landfill waste.	Employees are encouraged to utilize existing equipment and furniture versus purchasing new.
1.4 Travel			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Set a X% Travel reduction goal	In Progress	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	As a district with widely dispersed schools, it is anticipated that an initial 10% reduction in travel is achievable.
Trained staff in the use of Live Meeting (or other desktop collaborative software)	Complete	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	Every administrative computer can be used for video conferencing using Elluminate Live, or programs such as Skype.
Installed Video Conferencing facilities	In Progress	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	Every major community will have access to video conferencing equipment.
Initiated Travel Policy	In Progress	Reduction in staff travel time, reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	The existing policy will be amended to encourage reduction in GHG emissions and travel avoidance initiatives.
Mandated car pooling to government meetings	In Progress	Reduced mileage charges for employee vehicles, reduced maintenance and fuel costs for fleet vehicles.	Staff are encouraged to car pool currently.

1.5 Employee Engagement			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In Progress	Increased staff, student and community support for GHG reduction measures.	Environmental Think Tank established to address this area.
Provided conservation education	In Progress	Increased staff, student and community support for GHG reduction measures.	Environmental Think Tank established to address this area.
Developed Green Teams	In Progress	Increased staff, student and community support for GHG reduction measures.	Environmental Think Tank is reviewing various school-based programs, such as Destination Conservation, to support environmental initiatives.
Provided green tips	In Progress	Increased staff, student and community support for GHG reduction measures.	Environmental Think Tank is reviewing various school-based programs to support environmental initiatives.
Supported professional development	In Progress	Increased staff, student and community support for GHG reduction measures.	Meetings of interested staff to discuss environmental issues will become more formalized into Pro-D.
1.6 Sustainability Actions (others)			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Took water conservation measures – low flow showers or toilets, fix leaks	In Progress	Reduced environmental impact.	Continued program of installing low flow faucets, timers on irrigation and urinal systems etc.
Ran dishwasher only when full	In Progress	Reduced environmental impact and energy consumption.	Staff encouraged to only run dishwashers when full.
Reduced/replaced bottled water with filtered or refrigerated water	In Progress	Reduced environmental impact.	Bottled water usage is discouraged at meetings.
Improved recycling measures	In Progress	Reduced environmental impact and reduced waste into landfill stream.	Schools expanded recycling programs in various schools to include a broader range of items.
Supported composting	In Progress	Reduced waste into landfill stream.	Several schools are establishing gardens with composting.
Used re-usable dishes	In Progress	Reduced waste into landfill stream.	Use of disposable plates, cutlery and cups is discouraged at meetings.
Purchased green cleaning products	Complete	Reduced negative impacts on the environment and human health.	All custodial supplies must be "green".
Used green (low-e paints)	Complete	Reduced negative impacts on the environment and human health.	Low -e paints are currently in use for all paint applications.
Supported sustainable procurement practices	In Progress	Reduced environmental impact.	Procurement policies will reflect more sustainable practices.
Adopted low-carbon contracting practices	In Progress	Reduced environmental impact.	Staff encouraged to consider GHG emissions issues when engaging contractors.

Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

Overview

The District will continue its commitment to become carbon neutral by 2010. Our key focus in this area will be making plans and taking actions to reduce GHG emissions by engaging our students and employees. This will involve new and revised policies, resolutions and leadership influence to send a message that full participation is necessary to respond to this public priority.

We established an Environmental Think Tank to work closely with the District leadership team to develop policies and action plans that will engage our students, employees, community and governments.

2.1 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use	Planned	Reduced energy costs measurable by historical consumption data comparisons.	Review each employee workstation in the District to identify opportunities for energy savings.	2010
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned	Reduced energy costs measurable by historical consumption data comparisons.	Review opportunities and costs.	2010-2011
Undertaken Monitor turn-off challenge	Planned	Reduced energy costs measurable by historical consumption data comparisons.	Organize turn off challenges and pursue sponsor opportunities for prize incentives.	2010-2011
Initiate or complete a building energy retrofit	Planned	Lower energy consumption measurable by historical consumption data comparisons.	Install wind-powered generating system to reduce electricity consumption (part of a local project to replace Alert Bay Elementary School).	2009

2.2 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Commit to use 100% recycled paper	Planned	Higher costs and even lower environmental impact than 30% recycled paper.	Support for use of 100% recycled paper products will depend on available funding and suitable products.	2011
Purchase cradle to cradle goods	Planned	Potential higher costs.	Consider new or revised policies to encourage the use of suitable cradle to cradle goods, within available funding.	2009-2011

2.3 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Support alternative travel (bike/skateboard/walk/transit) for meetings	Planned	Lower travel costs associated with staff travel.	May be implemented through a new or revised travel policy.	2009-2010

2.4 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Hold contests to change behaviour/make pledge	Planned	Increased employee involvement. Increased staff resource time and costs. Reduction in GHG emissions.	Organize a sustainability working group/committee to lobby, coordinate, promote, develop targets, implement GHG initiatives, contests and education within the School District.	2009-2011
Hold contests/support to generate ideas	Planned	Increased employee involvement. Increased staff resource time and costs. Reduction in GHG emissions.	Organize a sustainability working group/committee which will have a mandate to encourage participation to generate ideas through contests.	2009-2011
Add a green work goal to performance management	Planned	Increased employee involvement. Increased staff resource time and costs. Reduction in GHG emissions.	Organize a sustainability working group/committee to develop goals, targets, actions and performance measures.	2009-2011
Encourage staff to walk or cycle to work	Planned	Reduced GHG emissions. Fewer staff vehicles parked in district and school lots during the work day.	Installation of staff showers, change areas and bike racks at work sites.	2010

2.5 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Planting of trees on district property	Planned	As the trees grow, carbon will be absorbed from the atmosphere. The performance will be based on the number and type of trees planted.	Schools may apply for grants of up to \$50,000 to plant trees on school grounds. Port Hardy Secondary School is a participant in this program.	2010
A new Environmental Sustainability Committee has recently been formed.	In Progress	Reduction of GHG emissions, reduced environmental impacts, and probably reduced costs through reduced energy consumption.	The Committee will review all processes within the district with a view to recommending improvements.	2010
Reduce the number of garbage containers.	Planned	Reduced environmental impact and reduced waste into landfill stream.	One garbage container per room will reduce plastic garbage bag consumption by almost 50%.	2009