

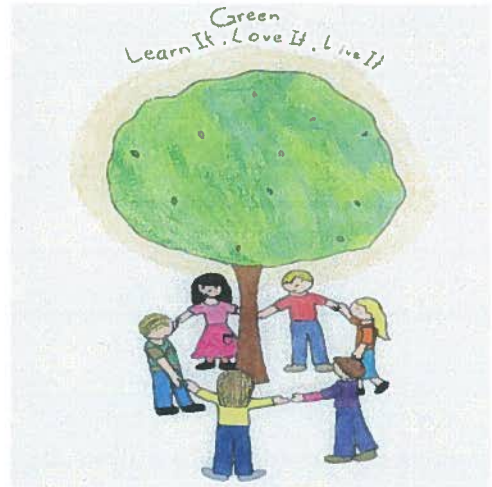
SD83 North Okanagan-Shuswap – 2011 Carbon Neutral Action Report

Executive Summary

As an Educational Organization in our region, School District 83 believes that we are accountable for providing leadership in environmental responsibility for our community.

As a commitment to our ecology, the North Okanagan-Shuswap School District has three primary goals: demonstrate a commitment for Understanding Sustainability, Modelling Green Stewardship, and Implementing Environmental Actions.

As a measure of meeting our Ecological Goals, many of our schools continue to enhance their recycling programs, reduce organic waste going to our landfills, and initiate Energy Awareness Campaigns. In collaboration with our neighbourhoods, our students participate in community cleanups, tree planting, waterway cleanups, and improvements to our watersheds by participating in raising Fry for Salmon Enhancement Programs.



Reducing our Carbon Footprint is a priority with the executive at SD83. To provide guidance to this directive, we have created an Energy Policy and committed to an overall five year energy reduction target of 16%. Environmental stewardship is taken into consideration in an increasing number of executive decisions.

Through Policy, all employees and students are responsible to conserve energy, help build a society that is environmentally sustainable, and to reduce our Carbon Footprint. To support these endeavours we continue to work with a number of agencies to promote initiatives in support of behavioural change.

Dave Witt

A handwritten signature in blue ink, appearing to read "D Witt", with a long horizontal stroke extending to the right.

Superintendent SD83, North Okanagan Shuswap

2011 Greenhouse Gas Emissions

In 2011 the operations of School District 83 contributed 3,877 tCO₂e of Carbon into the atmosphere. With our District encompassing over 5600 Km², we operate a large bus fleet across 32 routes transporting over 60% of our 6,150 students to school. With 6000 Km being traveled daily by our buses, they contribute less than 1,100 tCO₂e of Carbon annually into the environment. If the transportation by buses was not part of the services provided by our District, the impact of carbon emissions in our community would be much larger with parents bringing their children to school in automobiles. When the emissions of the buses are excluded from our Carbon Footprint, the net input into our ecosystem is 2,768 tCO₂e of Carbon.

School District 83 - North Okanagan-Shuswap Greenhouse Gas Emissions Source Detail Report for the 2011 Calendar Year

		Quantity	Greenhouse Gases In Tonnes			
			CO ₂	CH ₄	N ₂ O	tCO ₂ e *
Stationary Fuel Combustion (Building Heating and Generators) and Electricity						
Offset Required	Fuel Combustion **	43,465.25 GJ	2,234.76	0.04	0.06	2,255.07
	Purchased Energy	24,901.31 GJ	<u>171.82</u>	<u>0.00</u>	<u>0.00</u>	<u>171.82</u>
Offset Required Sub Total			2,406.58	0.04	0.06	2,426.89
TOTAL STATIONARY EMISSIONS			2,406.58	0.04	0.06	2,427
Mobile Fuel Combustion (Fleet and other mobile equipment)						
Offset Required	Fuel Combustion **	89,486.00 L	<u>197.10</u>	<u>0.02</u>	<u>0.05</u>	<u>214.57</u>
Offset Required Sub Total			197.10	0.02	0.05	214.57
Offset Exempt	School Bus	407,596.00 L	1,041.82	0.04	0.06	1,061.84
	CO ₂ from Biogenic Fuel Combustion		<u>46.78</u>	<u>N/A</u>	<u>N/A</u>	<u>46.78</u>
Offset Exempt Sub Total			1,088.60	0.04	0.06	1,108.62
TOTAL MOBILE EMISSIONS			1,285.69	0.07	0.12	1,323
Supplies (Paper)						
Offset Required	Non-recycled Content Paper	16,415 Pkg	114.00	0.00	0.00	114.00
	Recycled Content Copy Paper	2,000 Pkg	<u>12.58</u>	<u>0.00</u>	<u>0.00</u>	<u>12.58</u>
Offset Required Sub Total			126.58	0.00	0.00	126.58
TOTAL SUPPLIES EMISSIONS			126.58	0.00	0.00	127
Total Offset Exempt			1,088.60	0.04	0.06	1,109
Total Offset Required			2,730.26	0.07	0.12	2,768
TOTAL EMISSIONS			3,818.85	0.11	0.18	3,877

Offsets Applied to Become Carbon Neutral in 2011

As required by the Carbon Neutral Government Regulations, all of our Carbon Emissions were reported through input into SMARTTool. Our total 2011 emissions were 3,877, the bus fleet exemption was 1,109. With the equivalent of 2,768 tonnes of non-exempt Carbon being reported into SMARTTool, we were required to purchase offsets of \$69,200 plus HST, to make School District 83, Carbon Neutral.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2011

Schools start at staggered times to give the Buses a larger window of time to travel between bus routes. With the use of GPS Technology, all bus routes are designed to be as efficient as possible which reduces mileage, time, and the number of buses required to safely transport our students to school.

GPS technology is installed in all Maintenance vehicles. The Department has started to monitor travel with the goal being a reduction of "windshield time". This is complimented by refined planned work weekly schedules.

CO² Sensors monitor the air quality in the classrooms; therefore fresh air is introduced into the space as needed rather than by a fixed and constant amount. This not only reduces heating and cooling loads, but it allows additional fresh air to be delivered if air quality deteriorates. Air quality is better, and the amount of fossil fuels required to temper the outside air is diminished which also reduces Carbon Emissions.

Upgrades have been made to the exterior and interior lighting in many of our schools. We have added controls to the outside lights so areas other than the main entrances are turned off between 12:00am and 5:00am. As an added benefit, incidents of vandalism are down as there is reduced activity in areas surrounding "dark schools". The lighting level requirements in hallways are lower during class times. Controls have been added to hallway lights to automatically lower the light levels. These lighting initiatives will save the district 150,000 KWh annually in electricity.

By polling the activity on our LAN, we determined that 30% of the computers that were on were not actively being used. As a result we installed computer power management software in 2300 PC's to shut the computers off if they were inactive for 2 hours. By ensuring all the computers are actually used during the day, and are off on weekends and evenings we estimate an annual savings of 400,000 KWh of electricity.

The new MV Beattie Elementary School in Enderby is complete and operational; this was built to LEED Gold Standards. This facility is heated with Geothermal Ground Source Heat Pumps. Engineers are confident that auxiliary heat from the backup boilers will not be required even in the coldest of winters. With a good probability that natural gas will not be needed at this LEED Gold School, the tCO₂e emissions should drop by over 100 tonnes at this site. We have the ability to monitor energy use

in specific areas, allowing us to measure heating and cooling loads, domestic hot water demands, and plug loads.

With the mandate to reduce our Carbon Footprint, we have engineered and designed HVAC upgrades for three schools using Geothermal Ground Source Heat Pumps. All are 2010 MSUP submissions.

- Eagle River Secondary – potential 80% propane reduction & 72% CO2 reduction.
- Hillcrest Elementary – potential 80% natural gas reduction & 74% CO2 reduction.
- Armstrong Elementary – potential 90% natural gas reduction & 81% CO2 reduction.

The roof replacement program committed to add 2” of isocyanurate insulation on roofs where required, to increase the R value and reduce energy costs through heat loss.

Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

Our primary goal is to reduce our dependency on fossil fuels and lower our carbon footprint. One proven method is converting HVAC systems to ground source heat pumps. With this in mind, just considering our three MSUP submissions, we would reduce our carbon footprint by:

- Eagle River Secondary - 129 total tonne CO2 savings.
- Hillcrest Elementary – 85+ total tonne CO2 savings.
- Armstrong Elementary – 65+ total tonne CO2 savings.

According to Engineering, the total potential reduction would be 229+/- total tonne CO2.

Because our five largest schools are responsible for 40%+ the District’s energy consumption, our second strategy is to optimize the existing HVAC equipment at these facilities. Engineering, in partnership with BC Hydro’s continuous optimization program (COP) have completed an analysis of these facilities and will recommend steps to take to reduce energy consumption. Potentially by re-commissioning HVAC equipment savings could be 20% in natural gas and 12% in electricity. If we achieve the results indicated, carbon emissions will be reduced by 136 tonnes. Strategies learned during this mechanical retrofit will be implemented in future upgrades throughout the District.

The building performance index of a facility improves with decreasing energy requirements. Using 2008 as a benchmark, the average intensity for our District was 190 eKWh/m². Having set energy target reductions for the next five years, the building intensity average will drop to 160 eKWh/m² by 2013.

All interior florescent lighting is now T8 technology. The new low mercury florescent bulbs fail prematurely when used with magnetic ballasts. An inventory of ballasts was completed and from that the electronic ballast change out is near completion. At Pleasant Valley Senior Secondary over 1450 ballasts were T8 magnetic; this conversion will save over 50,000 KWh of electricity each year.

During unoccupied periods, circulation pumps that run continuously on domestic hot water tanks can waste up to 80% in energy, through heat loss in the circulation piping loops. All uncontrolled pumps will have controls added to cycle the pumps off when not required. Preliminary calculations have shown we could save 65,000 KWh in electricity and 500 GJ in natural gas.

There are limitations to the energy savings we achieve through technology. Through education and behavioural changes the populace can have an enormous impact on energy use. We are currently involved in energy awareness campaigns in our Middle and Secondary schools. In subsequent years we will expand this program into all of our facilities.



We are committed to:

- Understanding Sustainability
- Modelling Green Stewardship
- Implementing Environmental Actions

in our School, District and Community



SD83 North Okanagan Shuswap - 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
Mobile Fuel Combustion (Fleet and other mobile equipment)							
Vehicle fuel efficiency							
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Our entire fleet is involved in a comprehensive preventative maintenance program with the focus on safety and efficiency.	Ongoing	Started before 1995	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	70	% of current drivers are trained	Our Transportation department undergoes refresher training annually on fuel efficient driving.	Ongoing	2009	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			Anti-idle Policies are in place. Training is ongoing.	Ongoing	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Car pooling is encouraged when practical.	Ongoing	2009	No End Date (Continuous)
Other Mobile Fuel Combustion Actions							
Expansion of the GPS vehicle tracking systems into all our service trucks.	Ongoing/In Progress			Installation of GPS vehicle tracking systems in the majority of our service trucks. This technology discourages and tracks excessive idling, speeding, and tracks maintenance issues.	Completion of installation of GPS on all remaining school district vehicles. White Fleet - analyze data to improve routing and reduce fuel	2009	2012
Create Staggered Start and Finish times of Schools to reduce number of busses.	Ongoing/In Progress			By strategically changing the start and finish time for schools, it has lengthened the available window to transport students between home and school. This has resulted in the permanent reduction of six buses from our fleet.	Ongoing adjustments made due to declining enrollment	2009	No End Date (Continuous)
Improvement of our transportation department recycling program.	Ongoing/In Progress			We have a collection program to store lead acid batteries, used oil, anti-freeze, metal parts, containers, plastic jugs, and tires, all for recycling. Tires have been retreaded and we have been able to get up to 5 uses from a single tire carcass.	Ongoing	2007	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)	In Development			Creating an equivalent energy intensity building registry for all facility types in K-12 sector.	Creating a criteria format for equivalent energy intensity so data is comparable.	2009	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Completed in 2011	12	% of buildings have a real time metering system installed	Permanent installation of Pulse Meters on the Electrical and Gas services in our 5 largest schools. Installed semi-permanent ACR Energy Loggers in 3 facilities. Have purchased 1 ACR Logger as a floater for recording energy anomalies.		2009	2011
Owned buildings							

SD83 North Okanagan Shuswap - 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
Establish energy performance baseline for owned buildings	Ongoing/In Progress	100	% of owned buildings have an established energy performance baseline	Baselines were established for all facility based on the 2008 consumption figures. Work with facilities Department to take measures to lower higher than average exceptions.	Continue to monitor and review annually or better.	2009	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development	2	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	New Elementary School in Enderby was built to LEED Gold Equivalent Standards.	Continue to review and investigate for future designs and renovations.	2009	2011
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	2	% of buildings built or renovated since start year indicated used the integrated design process	Regular meetings occurred between the Capital Planning Manager, the 3 Design Engineer Teams, the construction crews, facilities maintenance crews and the teaching staff for the new MVBeattie School.	Evaluate the design of this new school for incorporation in future renovations in existing classrooms and facilities.	2009	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress	100	2 full time refrigeration Mechanics use best practices for maintenance.	Continuous tweaking of work order system to automatically create maintenance requests at scheduled intervals.	Continuous performance evaluations. Replacements will incorporate energy efficient heat pumps.	2009	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	2	% of owned buildings have undergone energy retrofits since start year indicated	With carbon reduction a priority in our District, we are in the design phase of replacing 2 natural gas heated schools with a Geo Thermal system.	District wide mechanical systems audit is underway.	2009	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	10	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Miscellaneous hot water tanks and boilers were replaced with more energy efficient models. When refrigeration equipment failed or was replaced efficient R410a equipment was specified. There was a select number of rooftop units that were replaced in our facilities.	Plans submitted for Installation of the Geo Thermal systems at Hillcrest Elementary, Eagle River Secondary and Armstrong Elementary Schools.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had lighting systems upgrades	All T12 Ballasts were changed to T8 ballasts at Armstrong Elementary, Pleasant Valley Senior Secondary and Downtown Activity Centre.	Continuing evaluation is being done on new lighting technologies for possible incorporation into our facilities.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	50	% of retrofits since start year indicated had control system upgrades or adjustments	Installation of building automation systems have been a priority in remote facilities. Adjustments can be made remotely without travelling to the site.	Feasibility planning of DDC systems at distant facilities throughout our District is a priority through the annual facility grant.	2000	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	0	% of retrofits since start year indicated had insulation improvements	Added additional insulation and new windows during on retrofits and when repairing buildings.	Continue to upgrade of roof insulation during reroofing. Targeted replacement of single pane windows in facilities with a poor building performance index.	2000	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	100	% of computers shut down automatically outside of regular business hours	Continued to tighten up 2 hour inactivity auto shutdown.	Continue to educate all staff and students.	2009	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	10	% of servers have been virtualized since start year indicated	Server consolidation combining adjacent facilities with fiber optics to a common server.	Consolidations will continue as infrastructures improve.	2008	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Completed in 2011	100	% of computers have auto-sleep settings applied	Completed auto-sleep settings on all computers.		2008	2011

SD83 North Okanagan Shuswap - 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
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	30	% reduction in printers, copiers, and/or fax machines since start year indicated	Removed stand alone printers and fax machines where possible.	Continue to remove desktop fax and printers.	2008	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Completed in 2011	100	% of devices have auto-sleep settings applied	Completed auto-sleep settings on copiers and faxes.		2006	2011
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress			Energy requirements are considered during purchases of new computers.	Replacement of inefficient PC's and monitors.	2009	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Replaced appliances with energy star rated equipment.	Continue to replace appliances with energy star equipment when possible.	2009	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 consideration is always given to appliances and electronic equipment. Budget constraints will factor into purchases if there are large discrepancies in pricing.	Work with Suppliers to purchase energy efficient products at better pricing and investigate new innovations.	2009	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			The Purchasing department has been instructed not to distribute incandescent light bulbs. Replacements will be appropriately sized CFL's.	Looking at even more energy efficient technologies such as LED lighting for personal workspace illumination.	2009	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Continued to educate staff and students on good energy reduction practices.	Continue to educate staff and students on good energy reduction practices	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Continued to educate staff and students on good energy reduction practices.	Continue to educate staff and students on good energy reduction practices	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Reminders to staff about use of blinds for energy conservation and security after hours.	Continue to educate staff and students on good energy reduction practices	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Continued to educate staff and students on good energy reduction practices.	Continue to educate staff and students on good energy reduction practices	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			We provide tips for energy conservation tips in the District news letter "On the Fly" and on the District web page, the "Green Corner" provides tips, contests, information and links to energy conservation sites. The link to this page can be found on our main District 83 site.	Continue to educate staff and students on good energy reduction practices	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Elevators are to be reserved for use by Handicapped individuals whenever possible. Stairs are encouraged for all healthy individuals.	Ongoing education.	2000	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Since 2002 the district has been actively engaging students to participate in energy reduction strategies. There are several reminders around the district about energy conservation. The "Green Team" is providing a continuation of these initiatives.	Ongoing education.	2002	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Staff is encouraged to run dishwashers only when full, wash laundry in cold water, and custodians are to do routine floor care with cold water.	We are investigating adding controls to Domestic Hot Water systems to reduce the heat loss in the systems. Controls will limit cycle time of circulation pumps or operation of HW Tanks.	2005	No End Date (Continuous)
Other Stationary Fuel Combustion, Electricity, and Fugitive Emissions Actions							

SD83 North Okanagan Shuswap - 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
Planning lights out for an hour or Dark afternoons as an awareness campaign.	Ongoing/In Progress			School participation for the occasional dark afternoon is raising awareness of multilevel switching and the benefits of reduced lighting levels.	Ongoing.	2008	No End Date (Continuous)
Recommission the HVAC equipment on our largest five schools	Ongoing/In Progress			Monitoring equipment has been installed on the electrical and natural gas services. Energy baselines and requirements of these facilities will be established with these meters.	We have hired consultants to oversee the recommissioning project and commence with gathering data to formulate a strategy for energy saving. We will implement the recommendations of findings on our equipment.	2009	2012
Expansion of summer vacant building equipment shutdown list.	Ongoing/In Progress			Existing summer vacant building equipment shutdown procedures expanded to include Hot Water Tanks, Domestic Circulation Pumps and Refrigerators. Compliance to these procedures is verified by a review of utility bills.	Provide training to onsite personal to enable them to have the understanding to do all the shutdown procedures within their buildings, rather than getting assistance from the maintenance department.	2009	No End Date (Continuous)
Reduce lighting levels in hallways during class time.	Ongoing/In Progress			Controls to reduced lighting levels have been completed in 3 schools. Sullivan Campus and Pleasant Valley Secondary have daylight sensors to reduce hallway lighting on bright days. JJackson Campus automatically turns off selected lights during class times with integration into the class bell system.	Integration of reduced lighting levels will be considered in other schools.	2009	No End Date (Continuous)
Use multi-level lighting controls to its maximum potential.	Ongoing/In Progress			Audit all facilities to ensure that high use spaces have multi level switching. Deficient areas will be identified and plans will be created to add this feature.	Continue to evaluate facilities for multi level switching.	2009	No End Date (Continuous)
Reduction of dependency of fossil fuels to environmentally friendly Geothermal systems.	Ongoing/In Progress			Design plans are in development for Eagle River Secondary and Hillcrest Elementary to install a Geothermal heating system.	Source funding for implementation of HVAC systems. Remaining facilities will be evaluated for consideration and planning for a Geothermal system.	2010	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	10	% of total paper purchased contains 30% recycled content	10% of paper purchases contain at least 30% recycled content.	Preference will be given to purchasing paper with a recycled content where competitively priced.	2009	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	0	% of total paper purchased contains 40% recycled content	Monitor pricing for recycled paper	Preference will be given to purchasing paper with a recycled content where competitively priced.	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	0	% of total paper purchased contains 100% recycled content	Monitor pricing for recycled paper	Preference will be given to purchasing paper with a recycled content where competitively priced.	2009	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	50	% of network printers or photocopiers are set to automatic double-sided	Programmed some printers to automatically print to double sided mode.	Continue education and remind staff to use double sided feature on printers where possible.	2008	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	50	% of network printers have 'print and hold' settings applied	Staff encouraged to use this feature where applicable.	Continue education.	2008	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress			Encouraged staff to use print preview feature on their documents to reduce paper waste.	Continue education.	2008	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	95	% of staff workstations with software installed	Pro D and training sessions are now booked through District web site. This eliminates paper and reduces the time necessary to organize these events.	Continue to encourage electronic communication.	2007	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress			District shared directories are encouraged and continually increased to provide paperless access to information.	Continue to encourage electronic document storage.	2007	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			District shared directories are encouraged and continually increased to provide paperless access to information.	Continue to encourage electronic document storage.	2007	No End Date (Continuous)
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	95	% of staff currently have received collaborative software training	Provide training and demonstrations on new technologies.	Continue training and education. Implement new technologies when appropriate.	2007	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Electronic information for meetings and training sessions are provided by web based media, projectors, white boards, etc. are encouraged.	Continue communication through email and electronic documents to reduce printed information.	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Employees are encouraged to use scrap paper whenever possible. Non Confidential materials are often available in containers throughout the district in the shredding rooms for use by staff.	Continue to recycle and reuse paper products as much as possible.	2008	No End Date (Continuous)
Other Paper Supplies Actions							
Paper Recycling Programs have been initiated throughout the District.	Ongoing/In Progress			Employees and Student are encouraged to recycle paper whenever possible.	Continue to expand the recycling and reuse of paper products.	2008	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	100	% of computers have web-conferencing software installed	We use both "Microsoft Live Meeting" and "Go to Meeting", to conduct web based meetings. We are limiting the number of computers with this program, but access is available at strategic locations. With advances in programs, theoretically can be used on all school district computers.	If as a result of carbon footprint reduction initiatives it becomes apparent there is a need for more web-conferencing software then installations will become standard in district computers. This will also result in the need for more training.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	1	% of staff have access to a desktop web-camera	Cameras are available for use with live meeting software. Cameras are discouraged in classrooms due to the privacy concerns of our students.	If web-conferencing becomes a standard practice of doing business, then a policy will be created for camera use and then cameras will become part of the media sites available to staff.	2008	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	The majority of all our facilities typically have access to a common area where web-conferencing can occur. Interviews can be conducted using video-conferencing which eliminates unnecessary travel.	If video-conferencing becomes a standard practice of doing business, then a policy will be created for camera use and then cameras will become part of the web-conferencing available to staff.	2008	No End Date (Continuous)
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress			Training is provided as required when circumstances for usage arise.	If web-conferencing becomes a standard practice of doing business, then training will increase as needed.	2009	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	100	% of staff are trained in video-conferencing or have access to technical support	The Technology Department has a help desk and personnel to provide support when web –conferencing is needed for our staff. This is done on an as needed basis rather than training as a district policy.	If web-conferencing becomes a standard practice of doing business and if training requests continue to rise then training would become part of a Pro-D for District training.	2009	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Department Heads and Central Staff are encouraged to try and promote their staff to use virtual attendance wherever possible to reduce costs and lower our carbon footprint.	If Virtual Attendance becomes more popular then increased access to web-conferencing equipment will occur and staff training will increase.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			It is common practice to encourage carpooling to meetings whenever possible. Since approval must be given prior to attendance of a meeting carpooling is part of the criteria for being given approval.	Continued vigilance in carpooling to meetings. When travel is unavoidable staff is encouraged to carpool.	2005	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Alternate travel methods are encouraged wherever possible and practical. We have encouraged walking to extracurricular activities of our students for years and are trying to get staff to set a good example as well.	Continued vigilance in using alternate transportation for staff. As a responsible corporate component in our community we want to set a good example.	2009	No End Date (Continuous)
Education, Awareness, and Engagement							
Team-building							

SD83 North Okanagan Shuswap - 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
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress		Formation of "Green Teams" in our largest facilities. Executive leadership is under sponsorship from our Superintendent, Dave Witt. The responsibilities of the Energy Manager have been shifted to other managerial portfolios. Effectiveness will be assessed over the next year.	Continue to promote and expand.	2009	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		Having an Energy Manager for 7+ months of 2011 helped to provide awareness and education for our Energy Team.	Continue to promote and raise awareness on energy use behaviour.	2009	2011
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		Continued the educational field trips to the Kingfisher Interpretive Centre which is a community-run salmon hatchery and outdoor education centre. Fertilized eggs are raised in the centre and in Elementary schools within our District, throughout the winter in preparation for the annual release of over 200,000 fry in June.	Continue to support the Kingfisher Interpretive Centre and educate students in this environmental cause.	Started before 1995	No End Date (Continuous)
Awards/Recognition						
Establish a sustainability/green awards or recognition program	Ongoing/In Progress		As a strategy with Executive Support we are creating an approach for providing motivation and acknowledgment for our behaviour program. Currently progressing very slowly due to job action by a significant segment of the employee group.	Implementation of the rewards program for our behaviour program. We will continue the quarterly strategic meetings for shared initiative planning.	2009	No End Date (Continuous)
Staff Professional Development						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		We had meetings to finalize the strategy for behaviour change. The launch of these initiatives occurred in October 2010 when we had the formal launch of our energy behavioural pilot. Some initiatives have continued in partnership with BC Hydro Energy Ambassador Program.	We will monitor and measure the success of the behaviour pilot and change it as necessary and then begin introducing it into our other schools in 2012.	2009	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		Climate Change as a topic is brought up during many district education seminars. Awareness focuses on behaviour which will lower energy dependency and reduce the impact on climate change.	Monitor the effects of climate change and attach importance to this topic to increase or decrease education.	2008	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Awareness of our water shed was raised and a group of concerned staff and students was formed. Grants obtained are funding on going awareness of watershed issues.	School District #83 will continue to support the protection of our Shuswap Watershed and the restoration of our river banks. Education on the importance of our watershed will be provided by BC Hydro's First Wave Energy Campaign which targets grades 4 to 7 was introduced in March 2011.	2008	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		Energy tips from our Technology Department and Central Staff are often put in our district news letter, "On the Fly". Tips are periodically included in the agenda for meetings with the staff across our district. Information for a green lifestyle is posted in "The Green Corner".	Frequencies of energy tips are to be increased to the point that they become a regular scheduled component of our news letter.	2008	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Education of Climate change has become a priority in the classroom. Literature discussed as part of the curriculum is taken home by our students to share with the community.	To provide current information on climate change and incorporate new technologies as they emerge.	2010	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		In conjunction with the education on conservation, recycling programs have become a part of daily activity in the classroom and administration buildings. Students and staff are encouraged to promote recycling at home and throughout the community.	To provide current information on conservation and incorporate new technologies as they emerge.	2010	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		Green tips are available on both the School District website and the Energy specific web page "The Green Corner".	Frequency of articles in our newsletters and on our website will increase as involvement in environmental projects within the District expand.	2010	No End Date (Continuous)
Other Education, Awareness, and Engagement Actions						
In tribute of Earth Day several schools do "earth friendly" projects across the district for a whole week.	Ongoing/In Progress		Guest speakers were brought into several schools to discuss environmental issues. Many schools are involved in tree planting initiatives. Other schools have anti litter campaigns and have students cleaning the community streets of trash. Initiatives have been delayed, but not stopped, due to the impact of teacher job action.	Continued engagement with the students on climate care. Many secondary schools take part in Earth Day where they participate in a conference where guest speakers are brought in to discuss topics ranging from sustainable agricultural practices to the use of geothermal technology for heating.	2007	No End Date (Continuous)
Reduction in use of small desktop printers.	Ongoing/In Progress		Staff is encouraged to use more efficient shared photocopier units rather than desktop printers when printing documents.	Actual elimination of many desktop printers in the district. The large networked photocopiers will also be replaced as budget permits with more efficient energy star rated equipment.	2008	No End Date (Continuous)
Take part in an international exchange program on exchanging sustainable mutual concerns for the environment.	Ongoing/In Progress		We are part of the Hokkaido-Armstrong exchange happening every two years that focuses on global stewardship using salmon as the "keystone species" for our joint studies. Many of our elementary schools raise salmon fry (from eggs to fry) and then let them go in local "salmon habitable" streams.	Continued participation in the Hokkaido-Armstrong exchange program.	2002	No End Date (Continuous)
Improve LAN infrastructure to improve speed and reduce physical number of servers.	Ongoing/In Progress		Installed fiber optic cable to physically link schools in close proximity and consolidate servers. This has meant a reduction in servers, the space needed to accommodate and cool the equipment, and a reduction in energy consumption.	As budgets permit we will continue to network schools together with fiber optic cable. Faster, larger, and more energy efficient servers will be purchased to replace aging and inefficient servers throughout the district.	2008	No End Date (Continuous)
Create recycle program for woodworking and metalwork assignments.	Ongoing/In Progress		Metal and woodwork programs are soliciting local businesses for scraps of metal and wood. This has reduced the materials going to our landfills and lowered the costs of materials for student based projects. Wood waste created in SD83 is sent to recycling with no by products ending up in our landfills.	Continued expansion of recycling program to ensure community familiarity of the agenda to minimize reusable materials going into the landfill.	2005	No End Date (Continuous)
Create program to promote the paperless environment with the use of Smart Boards, and eliminate the need for widespread use of whiteboard markers.	Ongoing/In Progress		Widespread use of Smart Boards has reduced the need for paper as lessons are stored on hard drives on a computer. This eliminates the need to replicate the lesson plans for multiple classes. Our District purchased 11 Smart Boards in 2011. The use of markers which may contain toxic chemicals will become obsolete. The Purchasing Department also purchased refillable markers.	Whiteboard pens will eventually be phased out as more Smart Boards are installed. The estimated cost on power consumption for Smart Board interactive whiteboards is \$1.48 per board per year.	2008	No End Date (Continuous)
Establishment of a district wide battery recycling program for rechargeable or one time use batteries.	Ongoing/In Progress		Call2Recycle has been sourced for appropriate recycling of Batteries. Prepaid Collection Boxes are provided to collect and ship spent batteries for environmentally responsible disposal. We have implemented this service in our largest facilities.	Expansion of the battery recycling program to all schools and facilities. We will raise awareness of the program and encourage staff and students to recycle batteries from home.	2010	No End Date (Continuous)
Elimination of dry and refrigerated vending machines from our Secondary and Middle Schools.	Ongoing/In Progress		Validating the benefits of power and CFC reduction to the school Administrators about the removal of refrigerated vending machines. With the vending equipment reduced, the schools can expand the existing school stores to provide nutritious snacks and provide retail training to more students.	Renewal of the vending machine contracts are done on an annual basis with consideration to reduce the remaining number of vending machines. Each school has plans to expand their school stores program.	2010	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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 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		Purchases of fixtures through the Facilities Department are done with water conservation in mind. Water Faucets are of the restricted type and water closets are mid flow variety.	Working with vendors to ensure we can purchase water conserving fixtures at a competitive price.	2006	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Ongoing/In Progress		Programming has been incorporated into cooling towers to minimize evaporation of water. Toilets fixtures are replaced as needed with mid flow types. Ornamental landscaping is designed using arid resistant plants and considered to minimize labour for upkeep and watering.	Future planning for retrofits in buildings or upgrades will have more considerations given into water management strategies.	2006	No End Date (Continuous)
Introduce a storm water management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		We have used bioswales at suitable facilities to remove excess water from the fields and direct the water into a natural wet land area.	Future planning for site upgrades and improvements will have more considerations given into storm water management.	2007	No End Date (Continuous)
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		All of our schools have a recycling program and a large number of schools have started a composting program. The student green teams have posters providing details on what to recycle and how to reduce and reuse. All wood waste including shavings is part of a recycling program and no longer goes to the landfill. Scrap Metal is collected at the Works Department and arrangements have been made with a local dealer for collection.	Work through our Purchasing Department and Vendors to continue to try to reduce waste. Buying things with less packaging. Possibly purchasing more containers for containment of items which have been identified as being recyclable.	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Lead Acid Batteries and used motor oil are collected in the Transportation Department for recycling. In our largest schools the Call2Recycle Program has been implemented for appropriate recycling of Batteries. Also collected is hazardous waste such as mercury from our science programs which is stored safely and picked up once a year. Fluorescent tubes are stored and then disposed in an environmentally friendly manner in bulk. Obsolete computers are centrally stored at the tech center and put on pallets for recycling pickup. Our Painting Sector tints their own pallets and has standard colors which all but eliminates waste paint.	We have a mandate to reduce purchases of hazardous products whenever possible. If the product is not bought, there is no need to dispose of it when it fails, wears out or is beyond its designed end of life.	2005	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		School District 83 sources suppliers which refill toners eliminating the need to dispose of spent cartridges. Preference is given to consumables with a recycled content if the purchase price is similar to products with no recyclables.	Continue to research and awareness of consumables whose manufacturing does not present a negative impact on the environment.	2008	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		It is preferred that furnishings are custom built in our Millwork Department where real wood and quality material provides a long lasting product. We are using carpet tiles on test projects which have substantially less waste on installation. The product is easier to clean and damaged areas can be replaced by tile rather than in totality.	Continue to research and promote awareness of products used in facilities which reduce time in maintaining and do not negatively impact the environment during use or in disposal. Preference will be given to products which have a long life cycle.	2007	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		The Custodial Department sources cleaning products which are environmentally friendly, poses minimal health risks with long term exposure to the users and performs well in cold water. Our Commercial Kitchen Program has switched to disposable plates and cutlery which are biodegradable and are approved for composting.	The Purchasing Department is sourcing biodegradable garbage bags at a competitive price in hope of using them exclusively throughout the district. Purchasing is also corresponding with schools trying to get combined orders to reduce the cost of biodegradable disposable plates and cutlery to the price of standard paper plates.	2005	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		Preference is given to catering services provided by our Commercial Kitchen Program. It is a priority of this teaching program to use sustainable and organic food. If food services or caterers are contracted, preference is given to vendors which provide locally available products.	Continue to educate our staff and students about the importance of purchasing and consuming sustainable and organic food. We want to create a continual nutritious lifestyle for our future generations that respects all species of life.	2009	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		Every effort is made to divert material from going into landfills. Office furnishings, shelving units, etc., if it can't be used within the district, are taken to auction houses for resale. During larger demolition projects, preference is given to competitively priced contractors which provide salvage services. Demolition occurs only after the district retrieves items that can be reused within our system.	Continue the education and awareness of our salvage and reuse program.	2005	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress		SD83 values attention to lifecycle costs as a prudent philosophy in long term building management. Purchasing equipment with long serviceability, low maintenance, and high energy efficiency is fiscally responsible and better for the environment.	Continue to research and use products in facilities which are innovative, energy efficient and do not negatively impact the environment during its life cycle.	2007	No End Date (Continuous)
Indoor air quality						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		SD83 created the "Allergies & Anaphylaxis" policy, which addresses the use of strong perfumes and deodorants within the district. It focused on the expectations of schools to reasonably accommodate staff and students with life threatening allergies and it includes a response plan should an allergic situation arise.	Continued Education and awareness of the "Allergies & Anaphylaxis" policy to staff and students. As a supplement to the policy an information brochure will be made available to enlighten individuals of the seriousness of living with life threatening allergies.	2009	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		In recognition of staff and students with possible asthmatic conditions the Facilities Department sources products with low VOC's when upgrading rooms. This includes the exclusive use of water based glues. The painting department has used water based paints and clear coats for years to minimize smells and lower irritation to occupants.	We are reducing our use of carpeting and escalating the use of hard surfaces such as linoleum. This allows better cleaning of the coverings, provides lower VOC's and improves the interior air quality of the space.	2005	No End Date (Continuous)
Commuting to and from home						
Offer staff a compressed work week	Ongoing/In Progress		Continuation in the Electrical and Mechanical Department of the compressed work week which allows for 80hrs of work to be completed in 9 days instead of the typical 10. This has resulted in a reduction of 10% in maintenance vehicle use and has allowed more time to complete jobs in a single day in distant facilities. Many of the other maintenance departments use the compressed work week during the summer.	Evaluation of the compressed work week for permanent expansion into other maintenance departments. With schools having staggered start and finish times there are benefits to having employees working a longer workday. With maintenance vehicles not required 10% of the time, there is an overall reduction in carbon emissions, routine vehicle maintenance is easier to schedule, and the unused vehicles can be used as "floaters" for reductions in spare vehicles.	2007	No End Date (Continuous)

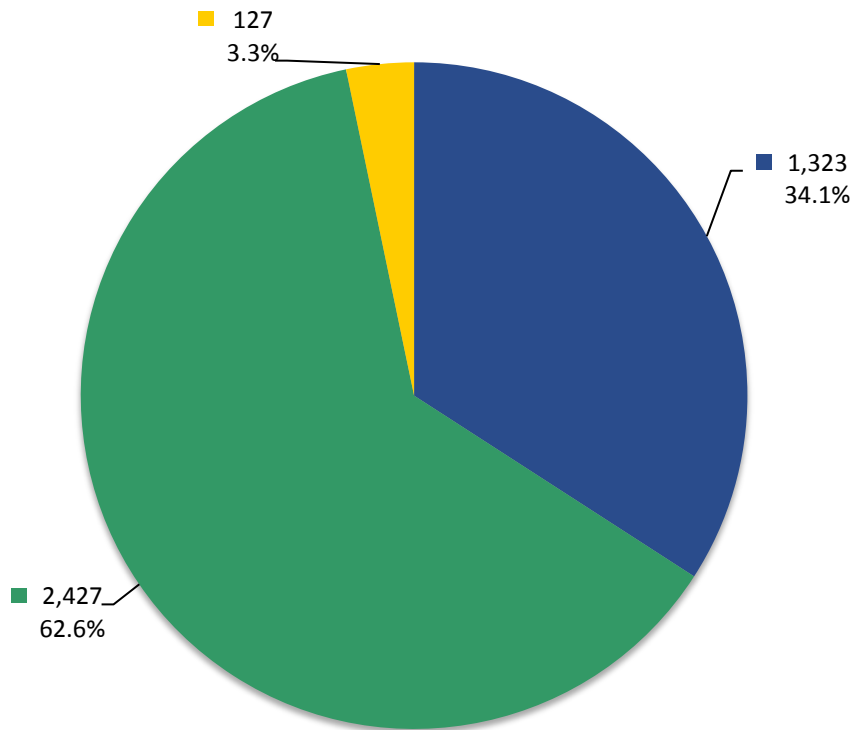
SD83 North Okanagan Shuswap - 2011 Carbon Neutral Action Report

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
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Many schools have included cycling as part of their fitness curriculum. This predicated that the students and supervision staff ride their bikes to school for use during fitness. Students are encouraged to walk to extracurricular activities but if distances require the use of transportation we schedule our own school buses to reduce the amount of vehicles required shuttling staff and students.	It is hopeful that cycling will become part of the fitness program at all schools. To encourage the use of bicycles for staff and students not only will bike racks be provided outside the schools, many schools are planning to provide secure areas for bicycles in the schools.	2005	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		Being a school district we have staff and student showers at most facilities. Gymnasiums are typically among the first areas opened each morning and are accessible for use by anyone at that building.	If increased cycling warrants the need for additional shower facilities, consideration will be considered for additional showers or other suitable solutions.	2005	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress		All schools have outdoor bicycle racks with attachment points for locks. Administration typically provides secure indoor storage for staff who request it. Rural students participating in fitness programs that can not commute with their bike are also given secure indoor storage for their equipment.	As needs for additional bike storage areas arise, suitable accommodations will be provided.	2005	No End Date (Continuous)
Other Sustainability Actions						
Reduced mail delivery runs.	Ongoing/In Progress		The delivery schedule for inter office and inter school mail was reduced from twice per week to once per week. We estimate this reduction will eliminate 25,000 kms and have an annual fuel savings of approximately \$9,300.	Continue delivery reduction schedules where possible.	2011	No End Date (Continuous)
Wellness and Fitness Programs.	Ongoing/In Progress		Wellness and Fitness programs are promoted throughout the District. A District Team was entered in the Annual Relay for Life program. Health club information is posted on our District Website. Employee Health and Wellness webinar information is sent out via District email.	School District Wide Pedometer Challenge introduced in 2012. Over 500 people signed up, teams were formed and miles will be logged. Grand prize to be awarded to the team that has logged the most steps by June 15, 2012. Continue to encourage and promote Health and Wellness programs.	2011	No End Date (Continuous)
Elimination of Fax machines.	Ongoing/In Progress		Fax machines have been removed and District wide faxes are now routed through email.	Continue and expand on this initiative where possible.	2010	No End Date (Continuous)
E File Student Documents	Ongoing/In Progress		E File Student documents rather than photocopying and attaching paper to student files. This allows real time access to student information and reduces paper.	Continue to E File documents and expand this to other applications such as our Purchase Order System.	2011	No End Date (Continuous)
Replace CRT Monitors	Ongoing/In Progress		Replace CRT monitors with more efficient LED/LCD monitors. In 2011 we replaced 68 CRT Monitors with Energy efficient LCD Monitors. The LCD monitors avg consumption is approx 20w compared to the CRT monitors @ 76w, this one half to two thirds less power consumption.	Continue to replace and upgrade computer monitors.	2010	No End Date (Continuous)
Replace printers	Ongoing/In Progress		An initiative was introduced with Xerox Docushare to provide funding to replace printers for more eco friendly initiatives.	Continue to pursue this initiative.	2011	No End Date (Continuous)
Letterhead Template	Ongoing/In Progress		We are actively looking into a letterhead template that will reduce and/or eliminate the need to purchase expensive letterhead paper and pre-addressed envelopes.	Continue to pursue this initiative.	2011	No End Date (Continuous)
Document Cameras	Ongoing/In Progress		The introduction of document cameras reduce the use of overhead projectors. This reduces the use of high energy bulbs and reduces landfill waste.	Continue to replace high energy overhead projectors.	2011	No End Date (Continuous)

SD83 North Okanagan Shuswap - 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
Reduction of Laminating Film	Ongoing/In Progress		Reduce the amount of laminating done at the District Office. We have reduced the purchase of laminating film from 8,000 ft of film in 2009 to 3,000 feet in 2011.	Continue to reduce lamination projects. Educate users, enable them to re-evaluate the requirement to laminate projects which will help to eliminate film in landfills and reduce energy costs.	2010	No End Date (Continuous)
Replace Intrusion Alarm Printers	Ongoing/In Progress		Remove and Replace alarm printers with an online software package, completion target is 2014.	Continue to remove alarm printers replaced by online software.	2011	2014

**School District 83 - North Okanagan-Shuswap
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 3,877

- 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: **2,768**. Total offset investment: **\$69,200**. Emissions which do not require offsets: **1,109** **

*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.