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 established a "Green Team" with an Energy Champion to mentor the staff and students in our Secondary and Middle Schools. The three primary goals of the Green Team are to 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 have enhanced their recycling programs, started composting programs to reduce organic waste going to our landfills, and have initiated Energy Awareness Campaigns. In collaboration with our neighbourhoods, our students participate in community cleanups, tree planting, waterway cleanups, and



learn It. Love It Live /

improvements to our watersheds by participating in raising Fry for Salmon Enhancement Programs.

As a showcase for our initiatives on reducing our ecological footprint we have created the Website, "The Green Corner" at http://www.green.sd83.bc.ca/. Regular updates and tips about sustainability will be provided in this forum.

Reducing our Carbon Footprint is a priority with the executive at SD83. We are in the second year of having a full time Energy Manager with a mandate of lowering our energy consumptions in our facilities. To provide guidance to this directive, we have created an Energy Policy and committed to an overall five year energy reduction target of 16%.

In 2010 we achieved energy reductions by replacing end of life equipment with energy efficient technologies and by increasing preventative maintenance and optimizing current HVAC Systems which included relaxing room temperature set points. We did several upgrades to our interior and exterior lighting, changing fixtures and adding controls to improve energy efficiency. We added power management software to automatically shutdown idle computers and ensure sleep settings were activated on all printers and copiers. 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 have provided additional Energy Awareness Campaigns.

Overall when compared to 2009, we had a 10.3% reduction in electricity, we lowered our natural gas use by 21.7% and achieved a 14% drop in propane usage. These reductions resulted in a \$159,000 savings in utility bills when compared to last year. This also reduced our Carbon Emissions by 519 Tonnes.

Superintendent SD83, North Okanagan-Shuswap

Doug Pearson

2010 Greenhouse Gas Emissions

In 2010 the operations of School District 83 contributed 3,500 tCO₂e of Carbon into the atmosphere. With our District encompassing over 5600 Km², we operate a large bus fleet across 34 routes transporting 53% of our 7,400 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 $2,470 \text{ tCO}_2\text{e}$ of Carbon.

2010 SD83 tCO₂e Carbon Emission Summary

<u>Date</u>	Building	Fleet Total	Fleet Exempt	Fleet Non Exempt	Paper	Total Non Exempt
Jan-10	358.38		-			
Feb-10	323.80					Q1
Mar-10	358.38	354.44	-300.64	53.80	1.94	1,096.30
Apr-10	129.19					
May-10	133.47					Q2
Jun-10	129.19	398.91	-338-36	60.55	3.06	455.46
Jul-10	18.18				120.91	
Aug-10	18.18					Q3
Sep-10	17.62	153,11	-129.87	23.24		198.13
Oct-10	225.01					
Nov-10	217.79					Q4
Dec-10	225.56	349.81	-296.71	53.10	_	721.46
Totals	2,154.75	1,256.27	-1,065.57	190.70	125.91	2,471.36

Total tCO₂e Emissions all Sources 3,536.93

Bus Fleet tCO₂e Exemption -1,065.57

Legislated Payable tCO2e Emissions

2,471.36



We are committed to:

- Understanding Sustainability
- Modelling Green Stewardship
- Implementing Environmental Actions

in our School, District and Community



Offsets Applied to Become Carbon Neutral in 2010

As required by the Carbon Neutral Government Regulations, all of our Carbon Emissions were reported through data input into SMARTTool. All submissions were completed from all sources in 2010 by February 17th, 2011. With the equivalent of 2,471 tonnes of Carbon being reported into SMARTTool, we were required to purchase \$69,198.08 of offsets to make School District 83, Carbon Neutral.



Carbon Offset Purchase Order Form

Organization Name:

School District #83. North Okanagan Shuswap

Contact Name:

Ross Higgins - Energy Manager

Contact Telephone #:

250-804-7834

Contact E-mail:

rhiggins@sd83.bc.ca

Date of submission:

MARCH 315, 2011

Period(s) covered by this purchase:

Quarter	Q1	Q2	Q3	Q4
Dates	January to March	April to June	July to September	October to December
Estimated Emissions or Actual Emissions (tCO ₂ e)	1096.3	455.46	198.13	721.46
Price per Tonne	\$25.00	\$25.00	\$25.00	\$25.00
Sub-Total	\$27,407.50	\$11,386.50	\$4,953.25	\$18,036.50
HST @ 12%	\$3,288.90	\$1,366.38	5594.39	52,164,38
Total Due	\$30,696.40	\$12,752.88	S5,547,64	\$20,200.88
Payment Date	MAR 31/11	Max 31/11	Mar 31/11	Mm31/11

HST Registration # 81429 7662 RT0001

Spending Authority Approval:

(Appropriate spending authority for purchasing organization)

The purchases of Carbon Offsets were completed prior to March 31st, 2011 making the North Okanagan-Shuswap School District 83, Carbon Neutral for 2010.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2010

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.

With CO² Sensors monitoring the air quality in the classrooms, 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.

We are currently building the new MV Beattie Elementary School in Enderby to LEED Gold Standards. This facility will be appropriately sized for student enrolment and will be heated with Geothermal ground source Heat Pumps. The existing school which is oversized by 33% is heated by either a natural gas boiler or standard roof top units. Engineered tests have shown that the field where the geothermal horizontal loops will be installed can provide optimal heat transfer. 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. In addition to the Carbon Footprint reductions, incorporated in the LEED Gold design is the ability to monitor energy use in specific areas. We will be able to measure heating and cooling loads, domestic hot water demands, lighting loads, and plug loads. Exception alarms will be programmed around these monitored points so if anomalies in energy use are detected responses and repairs can be made quicker.

With the mandate to reduce our Carbon Footprint in the school district, we have engineered and designed HVAC upgrades for two schools using Geothermal Ground Source Heat Pumps. As a criteria in determining the most environmentally responsible choice for upgrades, we gave consideration to our highest energy cost and use facilities. Eagle River Secondary is heated with propane resulting in the highest energy costs per meter in the district. In addition it has the 2nd highest energy intensity at 215 eKWh/m². Hillcrest Elementary is the 2nd candidate as the HVAC equipment is near end of life and with an energy intensity of 250 eKWh/m² it is the highest of all our schools. By having these projects pre-designed, applications can be expedited when additional capital funding or grants become available.

Plans to Continue Reducing Greenhouse Gas Emissions 2011 - 2013

Our primary goal is to reduce our dependency on fossil fuels and convert HVAC systems to ground source heat pumps. If we can implement the plans to convert Eagle River Secondary to Geothermal, it will reduce our Greenhouse Gases by 72% from that site. Energy costs will potentially drop by \$26,000 annually. The 26% reduction in energy requirements will lower our Carbon Footprint by 129 tCO₂e each year. At Hillcrest Elementary the natural gas boilers that primarily heat this facility are only 60% efficient. A Geothermal conversion to the energy efficient equipment that is available would lower the energy requirements at this site by 43%. Energy costs will drop by 13%, and with a much lower demand for natural gas, Carbon emissions will drop by 74% saving the environment from 85 tCO₂e of emissions.

The second strategy for reduction in fossil fuels is to optimize the HVAC equipment in our largest five schools. These facilities use over 40% of the total energy requirements for our District. Recommissioning HVAC equipment typically saves 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 at additional schools.

When unplanned equipment failure occurs, replacements will be energy efficient and incorporate the latest technologies and design.

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.

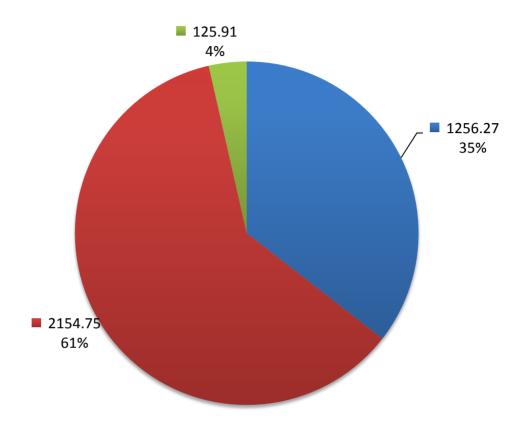
The majority of interior lighting is now using florescent T8 technology. The new low mercury florescent bulbs fail prematurely when used with magnetic ballasts. We will be inventorying the ballasts in all our facilities and changing to electronic ballasts as required. At Pleasant Valley Senior Secondary over 1450 ballasts are 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.

SD83 North Okanagan Shuswap

Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO₂e*)



Total Emissions: 3536.93

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: 2471.36. Total offset investment: \$61,784.00. Emissions which do not require offsets: 1065.57 **

^{*}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.

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 12/31/10)		Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year		
Mobile Fuel Combustion (Fleet and other mobile equipment)									
Vehicle fuel efficiency									
Perform regular fleet maintenance 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	100	% of all SD83 Vehicles are fitted with GPS tracking systems. Replacement vehicles are fitted with the technology as they are brought online.	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.	2009	No End Date (Continuous)		
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, antifreeze, 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.	We will continue to stay informed on any additional expansion on recyclable products in our regional district to deflect as much as possible from going into our landfill.	2007	No End Date (Continuous)		
Stationary Fuel Combustion, Electricity and Fugitive Em	nissions (Buildings)								
Planning/management									
Enrol in a building energy benchmarking program (e.g., GREEN UP)	In Development	164	eKwh/sqm average equivalent energy intensity of all facilities.	Creating an equivalent energy intensity building registry for all facility types in K-12 sector with BC Hydro Sponsored Energy Managers.	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)	Ongoing/In Progress	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.	Ongoing	2009	No End Date (Continuous)		

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Owned buildings						
Establish energy performance baseline for owned buildings	Ongoing/In Progress	% 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.	Ongoing Recalculate Base Lines with improvements.	2009	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	% of owned buildings are 2 certified LEED NC Gold or LEED NC Platinum	Building in progress for new Elementary School in Enderby to be built to LEED Gold Standards. The new 3000SqM facility will have enough space for all the existing students, and will replace the existing aging 5060SqM facility.	New School to be completed fall of 2011.	2009	2011
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	% of buildings built or renovated 2 since start year indicated used the integrated design process	Regular meetings occur 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.	With evaluation of acceptance of the design of our new school, this model will be incorporated 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	Have 2 full time refrigeration Mechanics which use best practices for maintenance.	Continuous tweaking of work order system to automatically create maintenance requests at scheduled intervals.	Evaluation of Systems and checking performance is within expectations.	2007	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	% 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.	Having design plans in place will allow for quick submission if funding for carbon reduction initiatives becomes available.	2009	No End Date (Continuous)
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	% 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.	Installation of the Geo Thermal systems at Hillcrest Elementary and Eagle River Secondary.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	% of retrofits since start year 100 indicated had lighting systems upgrades	We have completed installation of controls on outside lights as part of our dark school procedure to not illuminate facilities from 12am to 5am. We are investigating and replacing any remaining T8 magnetic ballasts with T8 electronic ballasts.	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	% of retrofits since start year indicated had control system upgrades or adjustments	Installations 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 vast District.	2000	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	% of retrofits since start year 20 indicated had insulation improvements	Additional insulation is added where warranted during scheduled reroofing. Single pane windows are typically replaced with double pane glass when renovations are done.	Continual 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)
Install an on-site renewable energy demonstration project	Ongoing/In Progress	% of retrofits since start year indicated had on-site renewable energy components	Cost analysis and performance study of solar heating for Domestic Hot Water, and solar generation of electricity.	Our energy ambassador "Green Team" is currently working with a local company to design a solar heated hot beverage prototype for a demonstration project.	2009	No End Date (Continuous)
IT power management						

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	% of computers shut down 100 automatically outside of regular business hours	A newer version of the 2 Hour auto shutdown software in School Facilities was installed on March 2010. Installation was completed in all computers on October 4, 2010. Additional features allowed teachers the ability to turn off all computers in their room from their PC.	Tighten up 2 hour inactivity auto shutdown to 1 hour.	2009	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	% of servers have been 5 virtualized since start year indicated	Virtualization is being considered but cost considerations could make this impracticable. Server consolidation is underway combining adjacent facilities with fiber optics to a common server.	Consolidations will continue as infrastructures improve.	2008	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	% reduction in printers, copiers, 30 and/or fax machines since start year indicated	Leasing of energy efficient networked photocopiers to reduce desktop printers; this eliminated the need for separate Fax machines. Incoming faxes have been routed to a central server for distribution through the email system to the intended recipient.	Reduce overall dependence of desk top printers.	2008	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	% of devices have auto-sleep settings applied	Our new photocopiers can quickly return to print mode after waking from sleep. This has enabled us to program these units for sleep after minimal inactivity.	Continuous review and compliance checks	2006	No End Date (Continuous)
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	% of fridges are ENERGY STAR rated	All Purchases go to the purchasing department who has been directed to purchase energy star fridges whenever possible.	Continue purchasing energy star appliances and sourcing rebates from various sources to offset costs.	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.	Working with vendors to express desire to purchase energy efficient products in hope of improving pricing and being kept apprised of any 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	% of current staff have completed a workstation tune-up	Our energy ambassador "Green Team" under guidance from Central Administration, audited office equipment use and provided awareness for best practices.	Working on a workplace conservation awareness pilot as a joint venture with BC Hydro to raise awareness of efficient energy use.	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress		Awareness for efficient energy is being raised by our "Green Team". Posters, signage, contests, classroom education has all been used to promote the endeavour.	Working on a workplace conservation awareness pilot as a joint venture with BC Hydro to raise awareness of efficient energy use.	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.	Working on a workplace conservation awareness pilot as a joint venture with BC Hydro to raise awareness of efficient energy use.	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress		We provide tips for energy conservation tips in the District news letter "On the Fly". A newly created 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.	Working on a workplace conservation awareness pilot as a joint venture with BC Hydro to raise awareness of efficient energy use.	2009	No End Date (Continuous)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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". A newly created 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.	Working on a workplace conservation awareness pilot as a joint venture with BC Hydro to raise awareness of efficient energy use.	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.	We are working with BC Hydro for additional stickers to include computer monitors, lighting and charging devices.	2002	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress		Staffs 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 and Electricity Actions						
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.	Provide measurement and verification on reduction of electricity at multiple sites during lights out campaigns. With measured results we hope that this will encourage turning off lights in vacant rooms.	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 a consultant to oversee the recommissioning project and commence with gathering data to formulate a strategy for energy saving. In 2012 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. JLJackson 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		An awareness campaign by the "Green Team" on the proper use of manual switching for multi-level lighting levels is ongoing.	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.	2009	No End Date (Continuous)
Create a registry of the number and size of single pane glass windows in the district.	Ongoing/In Progress		We replaced single pane windows with more efficient sealed units at various facilities.	Continuation of replacement of windows as planned upgrades or when single panes are broken.	2008	No End Date (Continuous)
Create a database of integrity of building envelopes.	Ongoing/In Progress		We have purchased an infrared camera to identify heat loss in our facilities. The infrared camera was used at Gateway as a trial.	A database will be compiled showing the heat loss of our facilities and an action plan will be formulated. Weather stripping and faulty windows will be replaced. Additional insulation will be installed where required.	2010	No End Date (Continuous)
Reduction of dependancy 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)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Supplies (Paper)						
Paper Type						
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	% of total paper purchased contains 30% recycled content	10% of paper purchases contain at least 30% recycled content. In 2009 we had no recycled content 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	% of total paper purchased contains 100% recycled content	Price point of 100% recycled content paper was significantly higher discouraging purchase.	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	% of network printers or photocopiers are set to automatic double-sided	Not automatic but staff is encouraged to use this feature where possible.	Continual education to remind staff to use double sided feature on printers.	2008	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	% of network printers have 'print and hold' settings applied	Not automatic but staff is provided with training to use this feature where necessary.	Reduction of personal desktop printers throughout the district to encourage printing to larger more efficient networked photocopiers.	2005	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress		Encourage staff to use print preview feature on their documents to ensure number of pages needed to print is minimized.	Continual education to remind staff to use best printing practices in the workplace.	2008	No End Date (Continuous)
Electronic media in place of paper						
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	% of staff workstations with software installed	Installation of First Class Email system in September 2007. Gradual introduction of all features to encourage staff to use it for posting messages, scheduling meetings etc.	Continue to encourage memo communication through email.	2007	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress		These are all features in First Class, which all staff is encouraged to use.	Publication of features of First Class in "On the Fly" or in Tips of the Week during staff meetings to keep staff aware of improvements.	2007	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress		Access to current MSDS sheets are posted online through Fetch. Information such as bookings or floor plans of our facilities is available online through First Class.	Post additional resources and material in First Class as it is deemed appropriate.	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	% of staff currently have 95 received collaborative software training	Working knowledge of First Class is Imperative at SD83, so training and demonstrations are offered continuously throughout the year.	Continual Training and addressing of any issues or problems that are encountered as we move forward.	2007	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		There have been several purchases of projectors which have been installed throughout the district. At meetings the projectors are used to display PowerPoint's or web based media. If the document is to be shared amongst the attendees it is preferred that it is done electronically rather than through printed media.	Continue to encourage memo communication through email and reduce the requirements to print.	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.	Continual expansion of encouragement to recycle and reuse paper products as much as possible.	2008	No End Date (Continuous)
Other Paper Supplies Actions						

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Paper Recycling Programs have been initiated throughout the District.	Ongoing/In Progress		Employees and Student are encouraged to recycle paper whenever possible.	Continual expansion of encouragement to recycle and reuse paper products as much as possible.	2008	No End Date (Continuous)

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 12/31/10)		Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Business Travel							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	2	% of computers have web- conferencing software installed	We use both "Micro Soft 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.	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	100	% 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	80	% of staff are trained web- conferencing	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 and will occur along with more training for staff.	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							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress	4	We have purchased energy loggers that can quantify savings in Kwh on Green initiatives.	Formation of "Green Teams" in our largest facilities. Executive leadership is under sponsorship from our Assistant Superintendent, Dave Witt.	We will be focusing on our largest Schools at the Secondary and Middle School type. We will continue working with the energy champions that are in place at each facility.	2009	No End Date (Continuous)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		We have obtained BC Hydro as a resource for corporate sponsorship of our Green Team. We have formulated a plan which has been implemented in our Secondary and Middle Schools.	The energy champions have committed to continue supporting this energy initiative through 2011.	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		We are working with the BC Hydro School Programs department developing a workplace Awareness Program to raise awareness for energy use behaviour.	We will have our Green Team implementing the behaviour program in our target schools. We will report current baseline energy use and then any subsequent changes in Energy use as a result of behaviour change.	2009	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. Recognition is posted in a link to "The Green Corner" which is found at www.sd83.bc.ca.	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.	We will monitor and measure the success of the behaviour pilot and tweak 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.	Monitoring the effects of Climate Change and the magnitude public opinion 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.	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, Energy Manager 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" which is found at www.green.sd83.bc.ca.	Frequencies of energy tips are to be increased to the point that they become a regular scheduled component of our news letter.	2009	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)
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. Students 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 newletters 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						

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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.	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. The use of markers which may contain toxic chemicals will become obsolete.	The Purchasing Department will phase out the non-reusable whiteboard pens and will create an exchange program so the staff does not have to refill the pens themselves. Whiteboard pens will eventually be phased out as Smart Boards are installed.	2008	No End Date (Continuous)
Establishment of a district wide battery recycling program for rechargeable or one time use batteries.	Ongoing/In Progress		Call2Recyle 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 gone, the schools can expand the existing school stores to provide nutritious snacks and provide retail training to more students.	Non-renewal of the contracts with the vending machine companies for the end of this school year. Each school has plans to expand their school stores program.	2010	2011
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 purchased 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)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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 stormwater 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		Most 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.	Working through our Purchasing Department and Vendors we will 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 Call2Recyle 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 paints and has standard colors which all but eliminates waste paint.	We have a mandate to reduce purchases of hazardous products whenever it is 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.	Continued 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.	Continued research and 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)
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)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress	% of the combined total food 90 and beverage purchase (in cost) meets these requirements	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.	Continued education to 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 the 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.	Demolition will occur with the completion of the new energy efficient MV Beattie Elementary slated for the fall of 2011. The original MV Beattie Elementary will be dismantled with as much debris as possible kept out of the landfill.	2005	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	% of business cases 90 incorporating lifecycle costing since start year indicated	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.	Continued research and awareness of products used 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)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Many schools have included cycling as part of their fitness curriculum. This predicates 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)

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
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)