



School District 43 Coquitlam – 2009 Carbon Neutral Action Report

Executive Summary

The Coquitlam School District Board of Education has established that climate change is a real concern and as a socially responsible school district we will continue to educate our staff, students, parents and our larger communities on the impact of our behaviour and choices of consumption and conservation. We continue to be supporters of the Climate Action Charter and the targets established in the Greenhouse Gas Emissions Target Act of 2007. Our main objective prior to 2009 was the consideration of energy conservation. The cost of utilities and the impact on the environment was a concern to all operations and management within the District. While some things were approached at the planning stage, and in capital replacements, the biggest impact was seen from sound daily operating practices, and attention to good housekeeping. The energy efficiency efforts did not require compromising indoor thermal comfort or air quality, but rather focused on providing the required conditions in the most efficient way possible. Now as we work towards carbon neutrality in 2010 we have expanded our environmentally sustainable practices and are moving forward with policies and procedures to ensure we have commitment that lasts beyond the introduction of government mandates.

In 2009 Coquitlam School District began taking comprehensive action against climate change by promoting environmentally sustainable designs for the future of all schools, students, staff and the community. School District officials worked to ensure understanding and involvement on the part of our students and employees of the environmental initiatives leading to sustainable behaviour change. The District also made budgetary plans to become carbon neutral in 2010. As part of a larger energy management strategy, Coquitlam School District projected significant reductions to energy consumption by the end of 2012 which are outlined in a district strategic energy management plan. The goal will be to reduce our overall energy consumption by 20-25 % from 2008 totals. Through the work of staff, students and our larger community, Coquitlam School District plans to implement considerable changes over the next three to five years that will address climate change and pursue carbon neutrality through the education, activation and innovation of staff, students and parents district wide.



The District created an Executive Level Green Team to provide a mandate for action and begin the process of implementing new administrative policies and procedures that would contribute to our overall goals of energy management, carbon neutrality and environmental sustainability. Some of the key objectives in our plans to move forward are outlined below:

- 1) To educate students and staff on energy consumption, our carbon footprint and issues of sustainability; the moral imperative, ultimately improving student achievement through ecological and environmental literacy.
- 2) To engage staff and students in *Climate Action* programs of change i.e. reduce environmental impact by minimizing solid waste, and supporting sustainable business and educational practices.
- 3) To integrate environmentally sustainable considerations into all of our business decisions.
- 4) To review and report our energy and sustainability performance in support of energy saving upgrades and maintenance across all facilities in our district.
- 4) To promote innovative designs in the implementation of sustainable facilities planning.
- 5) To develop well represented Climate Action Teams across the District that work closely with our Board of Education and District Leadership Team to ensure we are working together for a sustainable future.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

Coquitlam School District has been a Power Smart Partner with BC Hydro for several years and participated in an energy management assessment resulting in the hiring of an energy manager beginning in January of 2009. The District created an executive level “Green Team” in the Fall of 2008 to support the hiring of the Energy Manager and to begin the larger planning process for comprehensive action to reduce energy consumption and promote environmental sustainability in our educational community.

Our Facilities Department utilized limited infrastructure funding for several lighting retrofits and HVAC upgrades in an attempt to increase efficiency and reduce energy costs. Four major HVAC upgrades were completed in three elementary schools and one middle school in 2009. Gym lighting upgrades on five elementary schools, three middle schools and three secondary schools were completed as well. With the help from a grant from PSECA, Port Moody Secondary upgraded 70% of its lighting to more energy efficient systems.

Monitoring and measuring the efficiency of our centrally controlled heating and ventilation systems continued to be a focus for our Facilities and Maintenance Departments in an attempt to reduce the consumption of natural gas and to provide balanced systems in a variety of structures and school buildings across the District.



The New Glen Elementary School was completed with the consideration of the LEED Silver standards as a guideline. The new school introduces a passive heating and ventilation system with radiant floor heating for maximum efficiency. Large volume of glazing for day lighting opportunities and enhanced building envelope strategies were considered throughout the design.

Education and behavioural change campaigns were a significant consideration for the district throughout

2009. Schools worked with BC Hydro on several different educational programs such as Energy Detectives, Energy Campaigns, Energy Ambassadors, BC Hydro Energy Challenge and the Power the Games Tour. Schools participated in Power Smart Month in October as well as Walk to School Week. Coquitlam School District schools were part of the School Travel Planning (STP) pilot project developed in partnership with Green Communities Canada. STP was an intensive program that required students, parents, school and municipal officials to consider alternative modes of travel to reduce GHG emissions and traffic. Safety concerns were a key focus of the study as well. 15 Elementary Schools and 2 Middle Schools participated in this travel planning project with the support of *Urban Thinkers* and the City of Coquitlam.

Student leadership teams from several schools took on Climate Change as their goal for the 2009/2010 school year. Results of their efforts are difficult to benchmark at this time as far as energy consumption and carbon emissions reductions are concerned, yet the ground swell that has begun is rewarding in and of itself. New and more robust recycling programs came out of the efforts of student leadership teams at all levels K – 12 in the District.

Through education, activation and innovation several schools began looking at the feasibility of going “Zero Waste” as part of our larger Metro Vancouver Region’s planning for municipalities. Elementary students presented to four of our five City Councils to request support for improved recycling services for schools.



Implementation of higher level recycling and green waste pickups for schools began in cooperation with the Facilities Departments of the School District and our Municipalities as well as private vendors providing service to the school district.

The District Student Leadership Council hosted an Environmental Film and Art Festival in the April of 2009 for Earth Week. Over 40 works of art and 27 short films were submitted from across the district at all levels, to be shown and displayed at the festival. Students, staff and members of the larger Coquitlam School District Community came out to be part of this event. This was a great example of **education** and student **innovation in action**.



Five new schools are slated to be built in the next 3 to 5 years and all are required to be LEED Gold or better. Design team planning began and energy management and sustainability were high on the priority list of design features. The Manager of Energy and Sustainability sits on the design panel for each of the new schools as well as being a part of the long range facilities design process for our District. A district Energy and Sustainability website, [“Our Green Future”](#), was designed to support the collection and transfer of information to all schools and to provide a repository for climate action initiatives. Regular updates and initiatives were communicated through the Manager of Energy and Sustainability with the support of the Manager of Communications and Corporate Services.

Environmental campaigns and initiatives were supported with small grants to schools actively engaged in reducing their carbon footprint at the school and community level. Reports to the Board of School Trustees were made throughout the year to acknowledge and promote the education activities and innovative projects being facilitated around the District.

Quarterly reports were provided to schools to in regards to photo copying and paper consumption. Schools are expected to manage consumption at the school level through administrative vigilance. The majority of middle and secondary schools have moved away from paper newsletters and approximately 30 % of our elementary schools publish newsletters only on their school websites. As the use and capacity of our web technology platform *MY43* expands, more and more teachers, staffs and schools are going to paperless newsletters and

notices, as well as creating virtual classrooms and online homework and discussion boards, to reduce our paper consumption.

Operational Changes in 2009

Coquitlam School District hired an Energy Manager as part of the BC Hydro Energy Management Program.

The Coquitlam School District Facilities Department hired a Principal of Facility Planning as part of our new construction projects and new Neighbourhood Learning Centres initiatives.

The new Glen Elementary was completed in January 2010 and construction throughout the year may have impacted our energy consumption and carbon emissions as essentially two facilities were running for several months of the 2009 year.

Annual Facilities Grant funding was held back in June of 2009 and not available to complete energy upgrades and retrofits to aging inefficient facilities.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

Plans for future reduction of Greenhouse Gas Emissions will continue to focus on the moral and economic imperatives. We will **educate** our students, staff and parents. We will facilitate **action** and promote **innovation** leading to sustainable behaviour change across our larger community.

As part of our overall strategy to reduce our GHG emissions, Coquitlam School District will sharpen the focus on energy management and environmental sustainability for the next 2 to 3 years. With the support of the BC Hydro Energy Management program our goals to reduce our energy consumption will align with the following measures.



1) Demonstrated Leadership Commitment: Continue to promote energy and sustainability at the highest executive level of our School District with the support of the Chair of the Board of Trustees, our Superintendent of Schools our Secretary Treasurer and our executive level “Green Team”.

2) Understanding Performance and Opportunities: Having established a sound understanding of the energy consumption patterns for each major facility, determine the potential energy savings at the

system level by applying a more comprehensive and holistic approach to energy analysis and establish a plan for implementation.

3) Accountabilities: Establish clear roles, accountabilities, and expectations for energy control for site coordinators in key operating areas and locations.

4) Metering and Monitoring: Continue developing the capability for interval measurement of energy usage and performance at key energy consuming sites.

5) Auditing Protocol: Review the results of major energy saving projects at the end of each year or at the end of the project. Consider a formal, comprehensive audit of the energy management program, to be conducted annually or biennially, that is focused on evaluating, improving, and sustaining current practices, procedures, and protocols.

Facilities and Maintenance will prioritize HVAC and lighting upgrades that contribute to more energy efficient buildings and better learning and working environments for the students and staff across the District. As the design process for our five new schools progresses, the District will consult with energy modellers to ensure all of our new buildings perform at the optimal levels of energy efficiency and sustainability. Innovative design principles will be considered throughout the design process as partner groups, District Leadership and the community provide feedback as to the future of 21st Century Schools. The BC Hydro Continuous Optimization Program will be undertaken for several of our larger school sites over the course of the next 2 to 3 years to optimize building performance and systems efficiency.



Environmental education and sustainable behaviour change will continue to be one of our key focuses over the next three years as we attempt to shift paradigms and create a systemic approach to climate action, carbon neutrality and environmental responsibility. BC Hydro Education programs and teacher designed curriculum embedded across K-12 courses at all schools will be paramount to the success of our efforts. District, school and classroom presentations, fieldtrips, and workshops

will continue to highlight the importance of our task ahead. Incentive programs for schools and staffs will be considered to highlight the imperatives before us. Regular and targeted communication across the District to actively promote and celebrate all that we do towards reducing our carbon footprint will continue with strategic purpose. The District is counting on behaviour programs of environmental climate action to truly make the difference and reduce energy consumption levels by 10 to 15 % by 2012. It is a lofty goal for a District our size and we are confident that with the right level of executive support and the energy of the students and educators in the District we will far surpass our goals over the next three to five years. In the end the moral imperative is the one that counts. It is clearly the responsibility of the education sector to be leaders for this sustainable change.

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Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)							
Vehicle fuel efficiency							
Replace vehicles with more fuel-efficient models	In Development				Assessing fleet and downsizing where necessary. Over past three years we have decommissioned three vehicles. Will continue to look at options for purchase of more fuel efficient or hybrid vehicles for certain maintenance shop requirements.	2007	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	In Development				Assessing fleet and recommissioning where necessary. Reviewing job descriptions for larger vehicles and reviewing need for larger vehicle deployment.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Introduced in summer 2009 and carried out throughout 2010 school year. Regular monthly checks that include routine air filter and tire pressure checks.	Summer 2010 for yearly review. Practice updated on a needs basis.	2007	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	In Development				Will be looking into replacement of redundant or older vehicle models with some form of hybrid or fuel efficient vehicle. Consider purchase of electric grounds equipment to reduce fuels consumption and greenhouse gas emissions.	2010	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	50	% of current drivers are trained	Maintenance staff engaged in minimum training and outlining of professional expectations to reduce fuel consumption. Net reductions in fuel costs, or rather in consumption, will be a determining factor for success of this campaign.	Continuous training and staff development involving new procedures and best practices.	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	50	% of schools participating	Many sites post anti idling campaign stickers and promote campaign through monthly newsletter and online websites. Tracking measures have yet to be determined. Feedback will mostly be anecdotal from schools and other district sites.	All schools will be asked to report back in a survey as to how they have attempted to reduce idling at their specific site during the 2010 / 2011 school year.	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	In Development				Supervision of Maintenance vehicle use and promotion of carpooling to common work sites.	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Maintenance vehicles and drivers encouraged to carpool to common worksites from Maintenance shop. Board Office Staff encouraged to carpool.	Awareness campaigns in schools and at the Board Office.	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			BC Hydro Energy Manager Program.	Continue with Energy Manager Program. Consider Energy Specialist in partnership with BC Hydro and Terasen Gas.	2010	2012
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development				Continuous Optimization Program through BC Hydro will install pulse meters at all of our secondary schools and 5 of our larger middle schools for recommissioning over the next 1 to 3 years.	2010	2012

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Owned buildings							
Establish energy performance baseline for owned buildings	Complete	100	% of owned buildings have an established energy performance baseline	Part of Strategic Energy Management Plan and the BC Hydro Energy Manager Program.		2009	No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	In Development				Initiate some assessment of existing buildings to determine if we can justify LEED EB at any of our sites.	2009	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	0	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	All five of our new building projects initiated in 2009 will be LEED Gold or greater.	Three of five new or replacement schools to be built and certified by 2012. Remaining two buildings will be well into design phase.	2009	2012
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development				All new buildings built over the next 5 years will undergo a holistic approach to energy modelling and sustainable designs. All new buildings will be collaboratively designed through a process utilizing district staff, partner groups and selected consultants.	2009	2012
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	15	% of owned buildings have undergone energy retrofits since start year indicated	4 HVAC upgrades completed on elementary and middle schools. 7 minor and one major Lighting upgrade completed.	15 schools assessed for lighting and HVAC upgrades. 12 schools engaging in BC Hydro Continuous Optimization Program.	2010	2012
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	30	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades	4 HVAC upgrades completed on three elementary schools and one middle school. DDC controls maintenance and upgrades on two secondary schools and minor maintenance and upgrading of several middle and elementary schools.	Currently assessing 25 schools for HVAC upgrades or recommissioning. Tenders going out for HVAC upgrades to 4 schools and recommissioning of 13 of our larger sites through BC Hydro Continuous Optimization Program.	2010	2012
Upgrade lighting systems during retrofits	Ongoing/In Progress	70	% of retrofits (captured above) had lighting systems upgrades	Gym lighting upgrades on 5 elementary, 1 middle and 3 secondary schools. Major lighting upgrade at 1 secondary school	Gym Lighting upgrades planned for 12 to 15 schools. Continue on gym lighting upgrade program switching out old metal halide lighting for more energy efficient T-5 fluorescent fixtures. More lighting controls and occupancy sensors retrofitted into existing buildings.	2010	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	50	% of retrofits (captured above) had control system upgrades or adjustments	Major Secondary school lighting project included updated controls. Some lighting controls upgrades in smaller projects. DDC upgrades for HVAC systems in 3 elementary schools, 1 middle school and 2 secondary schools.	DDC Control upgrades on 4 elementary sites. Recommissioning of DDC systems on 13 of our larger sites. HVAC upgrades on 6-8 schools will include recommissioning or actual upgrade of DDC controls.	2010	2012
IT power management							
Install power management software which shuts down computers outside of regular business hours	Complete	90	% of computers shut down automatically outside of regular business hours	Installed Faronics Power Save software April 2009		2009	2009
Apply auto-sleep settings on computer monitors and CPUs	Complete	90	% of computers have auto-sleep settings applied	Part of Faronics Powersave software installation April 2009		2009	2009
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	In Development				Currently in discussions with District staff to streamline machines in all sites to multi use machines. New contract to be tendered in the 2010 year.	2010	2011
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	In Development				Determine what machines we will lease as per above. IT support to implement sleep settings on all machines.	2010	2011

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Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	75	% of computers are ENERGY STAR rated	As part of our on-going computer replacement program, all computers purchased must be Energy Star whether new or pre owned.	Continue to purchase Energy Star new and preowned computers through our computer replacement program.	2007	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	In Development				Draft and implement sustainable purchasing and procurement practices to support overall energy and sustainability policy.	2010	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	In Development				Draft and implement sustainable purchasing and procurement practices to support overall energy and sustainability policy.	2010	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	In Development				Draft and implement sustainable purchasing and procurement practices to support overall energy and sustainability policy.	2010	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	In Development				Will be included in the Workplace Conservation campaigns.	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	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			Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	Workplace Awareness Campaigns. School site education programs and information distributed through presentations and multi media.	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Energy Campaigns in 7 of 13 Middle Schools and 3 Secondary Schools	All schools will participate in lights out campaign for Earth Hour and other times throughout the year determined at the school level.	2009	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Workplace awareness Campaigns. School site education programs and information distributed through presentations and multi media.	Destination Conservation information supplied to schools through data management of utilities. Workplace conservation programs will be offered support from the district level with consumption data broken out between schools and some monetary incentives for conservation at each school that achieves certain targets.	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	In Development				Tender agreement with paper supplier to purchase only 30 % post consumer recycled paper.	2010	2011
Purchase 100% post-consumer recycled paper	In Development				Consider purchase of 100 % post consumer in new tender agreement with supplier to be rolled out in Summer of 2010	2010	2011
Printer/document settings							

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Switch networked printers and photocopiers to automatic double-sided	In Development				IT roll out of double siding to all district printers. Consider purchasing green print software to install on all computers to mitigate print waste.	2010	2011
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development				New Procurement of multi function printers / copiers will employ a print hold feature. Purchase of green print software to control print waste also being considered for purchase in the summer of 2010.	2010	2011
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Complete	100	% of staff workstations with software installed	Continued to offer Sharepoint training through learning teams and district professional development sessions	Ongoing professional development and training	2007	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress			MY43 Sharepoint platform for all departments to use for common forms and documents	Continue promotion and use of MY43 for all departmental documents and on line district services for employees.	2008	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			MY43 and School based Sharepoint services for websites and information. Promote the use of sharepoint for all communication from schools and Board Office. 70% of schools distribute newsletters through their Sharepoint sites.	All schools will use only electronic newsletters. Leave of Absence forms will all be on line. Board materials previously printed will all be distributed through our My43 Intranet web platform	2008	2010
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress			Our only remaining employees still receiving paper pay stubs are our CUPE employees.	Complete process of electronic pay stubs only for all employees.	2008	2010
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	70	% of staff currently have received collaborative software training	District continues to utilize MY43 sharepoint site for collaborative web services. More and more teachers are utilizing sharepoint for regular classroom communication and instruction support.	Continue training, implementation, upgrading of Sharepoint tools for all staff.	2007	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Staff meetings, newsletters, Board Meetings all are taking note of paper consumed. Board Meeting documents previously mailed to all trustees are now sent electronically.	Employee and community awareness campaigns to promote paperless meetings beginning with our Board of Trustees. Work with Staff Development Department to promote paperless classrooms through the use of our intranet and sharepoint services.	2009	2010
Encourage re-use of scrap paper	Ongoing/In Progress			Conservation awareness campaigns and messages. Improved recycling awareness.	Ongoing promotion of conservation through education in the classroom. Higher level recycling programs will promote conservation as well as solid waste diversion.	2009	No End Date (Continuous)

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Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Business Travel							
Policy and budgeting							
Create a low-carbon travel policy or travel reduction goal	In Development				Where possible encourage travel planning for Board Office Staff and encourage car pooling at all office and school sites. Travel planning and walk to school campaigns will be ongoing throughout the year to line up with special events and environmental initiatives going on at individual schools sites. Walk to school week in October will once again be promoted at the District level and will market the Board Office as a lead example.	2009	No End Date (Continuous)
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	40	% of computers have web-conferencing software installed	The district began piloting web conferencing software with the installation of new phone systems in the Board Office in the Fall of 2009. Web conferencing in different departments when communicating with outside agencies, the ministry, other public sector organizations, and webinars / webcasts for professional development are promoted throughout our organization.	Continue to promote live webcast viewing for professional development activities. Begin piloting web conferencing for weekly administrative meetings. Interschool web conferencing. Board Office webcasts and videos to report administrative procedures rather than bringing all administrative staff to a central location.	2009	2011
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	In Development				Installation of centralized video conferencing units is being considered at the Board Office and Staff development meeting room. To date we have been experimenting with mobile web cameras and will continue to do so, to create opportunity and engagement.	2009	2012
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	70	% of staff are trained web-conferencing	Ongoing professional development through our education technology committee, our IT department, school based technology specialists and teachers. On site training at many secondary schools and within the Board Office,	Continued professional development opportunities throughout the district from our IT department and Staff Development department.	2006	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	30	% of staff are trained in video-conferencing or have access to technical support	Ongoing professional development through our education technology committee, our IT department, school based technology specialists and teachers. On site training at many secondary schools and within the Board Office,	Continued professional development opportunities throughout the district from our IT department and Staff Development department.	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	In Development				Encouraging staff to participate virtually will fall in line with our capacity to host video conferences at our Board Office and Staff Development Meeting areas. As more of our staff members come on board with web and video conferencing capacity, regularly scheduled meetings will have a virtual viewing component giving staff the option to participate in the meeting from other sites.	2010	No End Date (Continuous)

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Encourage carpooling to meetings	In Development			Carpooling is always encouraged whenever there is an opportunity. Some district policies require that admin staff have their own vehicle available in case of emergencies at school sites or elsewhere. Board office staff will be asked to carpool more frequently to meetings where several board office staff are in attendance. Comprehensive carpooling campaign will be initiated to promote the possibility at our Board Office where we house over 70 employees.	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		Executive level Green Team consists of several members of our management and District Leadership team. A teachers Environmental LSA was established to represent teacher environmental initiatives throughout the district. Student Green teams are in place either formally or informally at 70 - 80% of all our school sites.	More comprehensive definition of Green Teams across district, whereas common expectations and support structures are in place through our Staff Development Department, the District Board Office, school based administrators and our other partner groups. Distinct policy will be created to support sustainability and the environment in all sites and across all partner groups.	2009	2011
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		A District Principal of Energy and Sustainability was hired in January of 2009, through the BC Hydro Energy Management Program. This position has been the driving force for education, activation and innovation in support of what was already happening in schools. With support of the Staff Development Department, District Leadership, and Facilities staff, some resources were made available to promote environmentally sustainable actions across the district. Provided Green grants to schools engaging in environmental projects at their schools sites, as part of a partnership with Envision Financial and the School District. Principal of Energy and Sustainability provided presentations for staff and students that promoted the big picture on climate change, and the district's climate action initiatives. Sustainable Resources 11 was offered in two secondary schools as an upper level science credit.	Consider hiring of a Terasen sponsored Energy Specialist to support the goals of energy conservation, and reducing our carbon footprint. Engage with teaching staff to create curriculum for integration into all classrooms K-12. Continue to provide small grants to promote environmental sustainability initiatives in all schools across the district. Principal of Energy and Sustainability will continue to provide in-service for staff and workshops for students and schools.	2009	2012
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		Behaviour change programs offered in schools and for district staff. Partnership with BC Hydro to facilitate programs and work with teams of students across all levels throughout the district. Workplace conservation programs beginning to be provided for staff in different positions.	Comprehensive workplace behaviour programs to be rolled out in the 2010 / 2011 school year for schools and support staff. Working with BC Hydro to develop the best program to meet the needs of a large district. Conservation awareness programs will be ongoing in schools through school wide presentations, classroom workshop[s] and curriculum implementation. Parents will be invited to support schools based education and awareness campaigns through their PAC groups. Community members will be invited in to share their expertise in all areas of energy management and environmental sustainability. All schools will participate in some form of behaviour change programming each year over the next three years. This may include but is not exclusive to events such as Earth Hour, Power Smart Month, Earth Week, Walk to School Week, and many other opportunities offered on a individual school and district level.	2009	No End Date (Continuous)
Awards/Recognition						

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Establish a sustainability/green awards or recognition program	Ongoing/In Progress		In partnership with BC Hydro Education Programs, student groups were rewarded with pizza lunches and other incentives for their efforts towards energy and sustainability campaigns in their schools and for participating in the Energy Ambassadors Program.	Continue to provide incentives for students taking on energy and sustainability campaigns in their schools and across the district. Provide incentives directly back to schools for their efforts to reduce their energy consumption. Schools who are able to reduce their consumption of energy, paper, water, and divert waste from landfills will be recognized as Sustainability or Climate Action Champions and will receive (minor) monetary rewards and major public recognition.	2009	No End Date (Continuous)
Staff Professional Development						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Created a Green LSA to support professional development amongst teachers in the district. Offered environmental workshops at district professional development days. Participated in BC Hydro sponsored power smart events and workshops promoting energy conservation. The District Student Leadership Council in partnership with the district held an environmental film and art festival during Earth week to promote sustainability.	Will continue to provide training and opportunities to participate in workshops that support energy conservation and ideas about sustainability in schools. Will provide technical training to maintenance and facilities staff members to manage our energy systems more effectively. Will plan environmental professional development workshops for teaching and support staff across district.	2009	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		Provided some in-service to staffs at staff meetings lunch and learns and professional development days. Schools engaged in learning activities with their students at all different levels and across the curriculum in a number of schools. A majority of schools in some form recognized the science of climate change and integrated this knowledge into their curricular or extra curricular activities.	Invitations for departments across the district to participate in professional development activities outlining the impact of negative environmental choices and the importance of behaviour change for a more sustainable future.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Resource management is taught to students throughout many different levels of the curriculum. Stats were provided to several school requesting information on consumption of water and energy. This information was provided on a facility by facility basis. Destination Conservation was revisited in some schools who had experienced the program before. Other schools took on their own education of staff and students through exercises or environmental campaigns and theme weeks.	Professional development opportunities to learn about the impact of waste and to promote conservation. Student and school campaigns to reduce waste and the consumption of water, energy and paper, will be supported through the District Office and distributed to all staff outside of the classrooms.	2009	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		Green tips were distributed to all staff through out the year and staff were encouraged to include in monthly newsletters and on websites. District Environmental Sustainability Website "Our Green Future" was launched as a reference for schools and the community. All schools participated in providing information on environmental sustainability to their larger communities.	All schools will have a direct link on their school website that highlights "Our Green Future" a public site with Intranet capacity to engage educators in SD43 in conversation about energy and sustainability. Teachers across the district will contribute to a repository of environmental sites, learning activities and project based learning opportunities that build on our mandate to Educate, Activate and Innovate for a better future.	2009	2011
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Presented to District Parents Advisory Council on science of Climate Change and the moral imperative that we have as a society.	Continue to promote the issues around climate change in the classroom embedded in across curriculums. The stronger the message is to our students the more likely it is to become a ground swell in the larger community. This is our moral imperative as educators. Public community gatherings sponsored by the district will also be pursued to bring the message to the community.	2009	No End Date (Continuous)

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Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Provided Parent education on energy conservation and awareness campaigns going on in the school district.	Awareness campaigns at the school level will continue to engage the public as we invite them in through our community of schools or growing neighbourhood learning centres to help expand our domain of social and environmental responsibility education in the community. Schools will continue to offer public awareness campaigns through their music and drama programs and through some of their extra curricular clubs.	2008	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		District Website providing green tips to public. on an ongoing but basis.	"Our Green Future" will continue to operate as the face of environmental sustainability at the district level. Teachers from the Environmental LSA will begin to provide updates and information throughout the school year. Regular updates will be linked to schools websites to create some critical mass, and to support the ongoing education at each school site.	2009	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	In Development			All five new schools scheduled to be built in the next three to five years will consider water efficient faucets and toilets as part of the LEED program. Maintenance will continue to address critical issues of water waste as we monitor each site's consumption levels on a monthly basis. efficient water fixtures will be considered for purchase as part of our sustainable procurement practices.	2008	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	In Development			New School designs are required to consider better storm water management practices as part of the LEED program. Vegetative roofs, permeable pavings and bioswales are all part of the conversation in the design phase of the new schools coming on board. While the building unit rate for schools does not support truly innovative environmental design strategies, the district and their consultants will search for the best case scenario when considering all aspect of landscaping and stormwater management.	2009	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		Began Zero Waste Campaigns in several schools as pilot projects. Individual school contingents presented to all of our City Councils to cooperate on reducing our building occupant waste. Student group presented to Metro Vancouver Region Waste Management Committee on our efforts in Coquitlam. Joined City of Port Moody single stream system and began bringing schools on line. Coordinated and supported 4 or 5 elementary school pilot projects to raise level of recycling and waste diversion. Began working on two Middle School "Zero Waste" Campaign in cooperation with the City of Port Coquitlam. (2010). Continue extensive paper and cardboard recycling program with private vendor. All schools manage individually juice and pop can recycling programs.	Continue to work towards maximum diversion of solid waste to landfill through comprehensive "Zero Waste" campaigns. Two middle school Pilot projects have been able to show diversion of up to 75 -80 % of their solid waste to landfills, through comprehensive recycling and green waste pick ups with support from the City of Port Coquitlam. Port Moody and Coquitlam schools involved in the pilot have been able to determine a 50-60 % diversion rate. Our goals will be to meet our 75 % waste reduction goals over the next 2-3 years in 60 to 70 % of our schools. Cooperation with the Metro Vancouver	2008	2012

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Implement a hazardous waste reduction and disposal strategy	Complete			Hazardous waste disposal taken on several times throughout the year with our recycling vendor and facilitated through our Occupational Health and Safety Department. This has been ongoing for several years back .		2006	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.)	In Development				Considering language in purchasing and procurement Administrative Policies and Procedures to support sustainable practices across the district. Individual schools purchase supplies in many different ways and a more comprehensive plan will have to be considered.	2010	2012
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	In Development				Purchasing and procurement language is being developed to support some green standards for furniture and equipment.	2010	2012
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress			Purchase green cleaning products from our cleaning supply vendor to pilot in several schools, as a result of scent free issues at particular sites. Promotion of paper towel recycling in paper and cardboard recycling programs for all sites.	New product procurement practices are planned for implementation in 2010. Green cleaning products to be rolled out to all schools over course of next two years as part of new custodial cleaning supply contract. Paper towel recycling will be part of our Zero Waste efforts.	2009	2012
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			New elementary school building and several seismic upgrades to schools considered diversion and waste management of materials in accordance with the Canadian Green Building Council's LEED standards. On materials and resources.	All new building construction is required to meet minimum LEED Gold standards. Construction waste management, use or recycled content, regional materials and certified wood are all consideration within design plans for schools and seismic upgrades. LEED EB will be considered for future plant and facilities upgrades over the course of the next 5 years as part of our Capital Plan.	2009	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	60	% of business cases incorporating lifecycle costing since start year indicated	All new construction, facilities upgrades, renovation and seismic upgrades considered life cycle costing as part of the of the overall business case and prioritizing of projects in the yearly Capital Plan.	The District will continue to establish best business case planning for all Facilities and Maintenance projects . Priorities for facilities upgrades, further seismic projects, minor renovations and new construction will incorporate Ministry requirements, findings allocations and life cycle costing into the scope of any work to be done. .	2008	No End Date (Continuous)
Indoor air quality							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress			Scent-free policy in place at 25 % of our elementary schools as well as at District Board Office.	Continue to promote and enforce scent free programs across district with goal to have all of our elementary schools scent free with all of our secondary and middle schools working towards actions that would support a scent free environment to enhance the current learning environment.	2007	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			Low VOC paints have been part of our purchasing policy for past few years. Both indoor and outdoor painting projects on all schools use low VOC paints.	Continue to purchase low VOC paints for all facilities upgrades. Establish higher standards for use of low VOC products in our new purchasing and procurement policies and procedures.	2010	2011
Commuting to and from home							

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Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			80% of our schools actively promote walking, biking, carpooling or bussing to school for the student population. Many staff members are required to have their vehicles as part of their work requirements.	Will promote more comprehensive campaigns district wide during several walk to school weeks or days throughout the year. Will implement staff transportation campaign on a site by site basis to encourage more staff to walk, bike, carpool or bus to their worksite. The District Board Office will engage in a promotion campaign at least twice a year to model healthy commuting practices to their places of work.	2009	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Many existing schools have minimal shower and locker facilities for staff use when commuting by foot or by bicycle. No new upgrades undertaken in 2009 to improve this situation.	New and replacement school construction will consider staff shower and change facilities to promote healthy lifestyles and opportunities for better commuting practices.	2010	No End Date (Continuous)
Provide secure bicycle storage	In Development				All new buildings will consider secure bike storage as part of the LEED requirements.	2010	No End Date (Continuous)
Modify parking fees or parking availability for staff/students	In Development				As part of the new construction in the district the design teams are looking for ways to reduce parking allotments at each new site to promote more walking to these neighbourhood sites. Planning has to be consistent with City bylaws in our multiple municipalities. Alternative parking surfaces are also being considered.	2010	2012